

Message

From: Gilliland, Sarah [gilliland.sarah@epa.gov]
Sent: 6/12/2020 8:03:30 PM
To: Topinka, Natalie [topinka.natalie@epa.gov]
Subject: Fw: Counterfeit R421A Non-SNAP Approved Refrigerant

Hi Natalie,

I mentioned on our call earlier that I'd be getting in touch about another enforcement issue. I realized it probably would be easier to send this to you via email instead of chatting about it initially, so you can look through everything.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Let me know if you'd like to chat about this. Thanks!
Sarah

Sarah Gilliland
U.S. EPA
Stratospheric Protection Division
Office of Atmospheric Programs
Mail Code: 6205T
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460
(202) 566-2859

From: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Sent: Thursday, June 11, 2020 1:32 PM
To: Maranion, Bella <Maranion.Bella@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>
Cc: Gilliland, Sarah <gilliland.sarah@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

+ Sarah for awareness

Thanks Bella. Your response seems fine, but I recall they were asking for an enforcement interpretation as well. I can't

Ex. 5 Deliberative Process (DP)

Best,
Luke

From: Maranion, Bella <Maranion.Bella@epa.gov>
Sent: Thursday, June 11, 2020 1:19 PM
To: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: FW: Counterfeit R421A Non-SNAP Approved Refrigerant

Hi Margaret and Luke,

I'm coming back to this given a number of follow up emails from him. Margaret helpfully followed up and check on some of the sites and information that he shared, but really not much more information was available regarding the lubricant. Here's a draft response and would appreciate your review and any comments:

Dear Max,

Thank you for your email and the information that you've forwarded to us. We've reviewed your information along with other publicly available information on the Dynatemp product. There is very little to no further information available about the specific lubricant used.

Ex. 5 Deliberative Process (DP)

If it's helpful to further discuss, please let us know.

Thanks,
Bella

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Sent: Thursday, June 11, 2020 11:00 AM
To: Maranion, Bella <Maranion.Bella@epa.gov>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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From: Maranion, Bella <Maranion.Bella@epa.gov>
Sent: Thursday, March 5, 2020 2:29 PM
To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: FW: Counterfeit R421A Non-SNAP Approved Refrigerant

Dear Mr. Williamson,

I'm happy to schedule a call with you so I can better understand your concerns. I'm out of the office this week, so hope that we can connect next week. Some times that would work for me are:

- Tuesday 3/10 at 1pm,
- Wednesday 3/11 at 9:30am,
- Friday 3/13 at 9-11am.

Please let me know a good time for you.

Best regards,
Bella

Bella A. Maranion, Branch Chief
Alternatives and Emissions Reduction Branch
U.S. Environmental Protection Agency
Office of Air and Radiation
Office of Atmospheric Programs, Stratospheric Protection Division
Phone: (202) 343-9749
maranion.bella@epa.gov

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Sent: Thursday, March 05, 2020 11:45 AM
To: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Maranion, Bella <Maranion.Bella@epa.gov>
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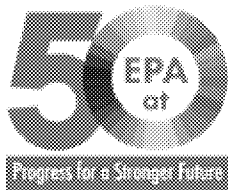
From: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Sent: Thursday, March 5, 2020 10:05 AM
To: Ken Ponder <choice.refrigerants@gmail.com>; David M. (Max) Williamson
<maxwilliamson@williamsonlawpolicy.com>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Maranion, Bella <Maranion.Bella@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Hi Ken and Max,

I'm copying in Bella Maranion, my counterpart that manages the SNAP program, and removing Natalie from this chain for the time being. It seems like a follow up conversation with Bella and Margaret makes sense so you can better understand how the program operates and they can better understand your concerns. I'll leave it in their capable hands from here.

Best,
Luke

Luke Hall-Jordan
Chief, Stratospheric Program Implementation Branch
Stratospheric Protection Division, U.S. EPA
202-343-9591 (office)
202-230-7589 (mobile)



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Thank you for your response. Once again the simplest of logic our government doesn't recognize so sad. How could ms Shepard not see that our lubricant was part of our application? And as God as my witness on an EPA web site they listed the blend with mention of the lubricant. It's the product we sell and to change any part of a component changes the product. We might could include conversations with sherive chemical who produces my particular lubricant .

Comments

On Thu, Mar 5, 2020 at 8:40 AM David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com> wrote:

Ex. 4 CBI

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Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Mr. Williamson,
Thank you for contacting EPA.

The SNAP program's listing found acceptable R-421A, a refrigerant consisting of 58.0% HFC-125 and 42.0% HFC-134a by weight. The listing mentions Choice R421A as a common trade name for this refrigerant and does not mention the proprietary lubricant. Thus, as long as a refrigerant is sold that contains 58.0% HFC-125 and 42.0% HFC-134a by weight and no other refrigerants, it is consistent with EPA's listing and we would consider it to be acceptable, even if there is a different lubricant.

If those two compounds in that specific ratio are mixed with other refrigerants, then it would be a new refrigerant blend; depending on the composition, it might not be acceptable and it might require separate submission and review under SNAP.

Sincerely,

Margaret Sheppard
Lead Environmental Protection Specialist
Significant New Alternatives Policy (SNAP) Program
US EPA/Stratospheric Protection Division
Tel. 202-343-9163
Fax 202-343-2338
Email sheppard.margaret@epa.gov

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Sent: Monday, March 2, 2020 11:17 AM
To: Topinka, Natalie <topinka.natalie@epa.gov>
Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>
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--

Ken Ponder
Choice Refrigerants
610 McFarland 400 Drive
Alpharetta, GA 30004
(888) 659-COLD toll free
(770) 777-0597 phone
(770) 777-0599 fax
www.choicerefrigerants.com

Message

From: Gilliland, Sarah [gilliland.sarah@epa.gov]
Sent: 6/11/2020 6:13:28 PM
To: Maranion, Bella [Maranion.Bella@epa.gov]; Hall-Jordan, Luke [Hall-Jordan.Luke@epa.gov]; Sheppard, Margaret [Sheppard.Margaret@epa.gov]
Subject: Re: Counterfeit R421A Non-SNAP Approved Refrigerant

Happy to help! I'll look through this and reach out if I have questions before I talk to Natalie.

Sarah Gilliland

U.S. EPA
Stratospheric Protection Division
Office of Atmospheric Programs
Mail Code: 6205T
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460
(202) 566-2859

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Cc: Gilliland, Sarah <gilliland.sarah@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Thanks, Luke! I would welcome Sarah's help to coordinate with Natalie on this. I'd like to respond back to him soon.

Sarah – if you need more background to set up something with Natalie, please let us know.

Thanks!
Bella

From: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
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Cc: Gilliland, Sarah <gilliland.sarah@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Sure. Or Sarah can take on the coordination if that's easier. Up to you on how you want to work it.

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We haven't run this down with Natalie but that might be helpful. Should I flag/forward to Natalie?

Thanks,
Bella

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Ex. 4 CBI

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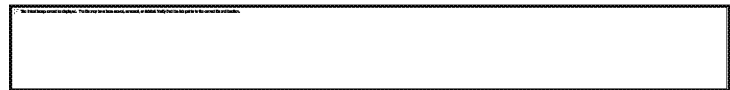
Bella A. Maranion, Branch Chief
Alternatives and Emissions Reduction Branch
U.S. Environmental Protection Agency
Office of Air and Radiation
Office of Atmospheric Programs, Stratospheric Protection Division
Phone: (202) 343-9749
maranion.bella@epa.gov

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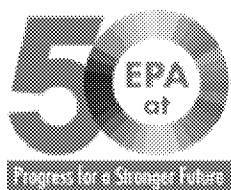
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202-343-9591 (office)
202-230-7589 (mobile)



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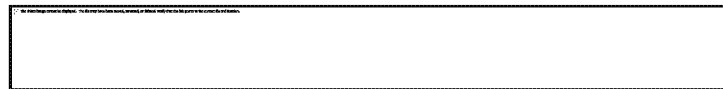
Comments

On Thu, Mar 5, 2020 at 8:40 AM David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com> wrote:

Ex. 4 CBI

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Sent: Tuesday, March 3, 2020 4:40 PM
To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>; Topinka, Natalie <topinka.natalie@epa.gov>
Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
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Sincerely,

Margaret Sheppard
Lead Environmental Protection Specialist
Significant New Alternatives Policy (SNAP) Program
US EPA/Stratospheric Protection Division
Tel. 202-343-9163
Fax 202-343-2338
Email sheppard.margaret@epa.gov

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--
Ken Ponder
Choice Refrigerants
610 McFarland 400 Drive
Alpharetta, GA 30004
(888) 659-COLD toll free
(770) 777-0597 phone
(770) 777-0599 fax
www.choicerefrigerants.com

Message

From: Maranion, Bella [Maranion.Bella@epa.gov]
Sent: 3/5/2020 5:50:16 PM
To: Hall-Jordan, Luke [Hall-Jordan.Luke@epa.gov]
CC: Sheppard, Margaret [Sheppard.Margaret@epa.gov]; Farquharson, Chenise [Farquharson.Chenise@epa.gov]
Subject: Re: Counterfeit R421A Non-SNAP Approved Refrigerant

Thanks Luke.

Margaret can you please follow up to schedule call next week? Not sure we need anyone else from SNAP Team.

Thanks,
Bella

Sent from my iPhone

On Mar 5, 2020, at 12:30 PM, Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov> wrote:

Bella and Margaret- Unless you want me to engage further, I'm leaving this with you and the SNAP team for follow-up.

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Chief, Stratospheric Program Implementation Branch
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202-343-9591 (office)
202-230-7589 (mobile)

<image002.png>

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Sincerely,

Margaret Sheppard

Lead Environmental Protection Specialist

Significant New Alternatives Policy (SNAP) Program

US EPA/Stratospheric Protection Division

Tel. 202-343-9163

Fax 202-343-2338

Email sheppard.margaret@epa.gov

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>

Sent: Monday, March 2, 2020 11:17 AM

To: Topinka, Natalie <topinka.natalie@epa.gov>

Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>

Subject: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

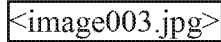
Ex. 4 CBI

Ex. 4 CBI

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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--

Ken Ponder
Choice Refrigerants
610 McFarland 400 Drive
Alpharetta, GA 30004
(888) 659-COLD toll free
(770) 777-0597 phone
(770) 777-0599 fax
www.choicerefrigerants.com
<Dynatemp R421A image.jpg>

Message

From: Ken Ponder [choice.refrigerants@gmail.com]
Sent: 3/5/2020 5:12:28 PM
To: Hall-Jordan, Luke [Hall-Jordan.Luke@epa.gov]
CC: David M. (Max) Williamson [maxwilliamson@williamsonlawpolicy.com]; Maranion, Bella [Maranion.Bella@epa.gov]; Sheppard, Margaret [Sheppard.Margaret@epa.gov]
Subject: Re: Counterfeit R421A Non-SNAP Approved Refrigerant
Attachments: ATT00001.txt

Sounds good, thank you.

On Thu, Mar 5, 2020 at 10:05 AM Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov> wrote:

Hi Ken and Max,

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Luke

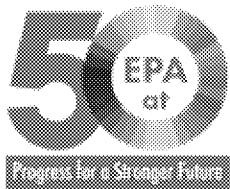
Luke Hall-Jordan

Chief, Stratospheric Program Implementation Branch

Stratospheric Protection Division, U.S. EPA

202-343-9591 (office)

202-230-7589 (mobile)



From: Ken Ponder <choice.refrigerants@gmail.com>
Sent: Thursday, March 05, 2020 9:25 AM

To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>

Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Topinka, Natalie <topinka.natalie@epa.gov>

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Comments

On Thu, Mar 5, 2020 at 8:40 AM David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com> wrote:

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1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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From: Sheppard, Margaret <Sheppard.Margaret@epa.gov>
Sent: Tuesday, March 3, 2020 4:40 PM
To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>; Topinka, Natalie <topinka.natalie@epa.gov>
Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
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Regards,

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--

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Message

From: David M. (Max) Williamson [maxwilliamson@williamsonlawpolicy.com]
Sent: 3/5/2020 4:45:14 PM
To: Hall-Jordan, Luke [Hall-Jordan.Luke@epa.gov]
CC: Sheppard, Margaret [Sheppard.Margaret@epa.gov]; Maranion, Bella [Maranion.Bella@epa.gov]
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant
Attachments: Dynatemp R421A image.jpg

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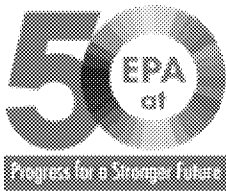
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Contact your local sales representative for detail
Pallets can be mixed and matched as le

Qualifying products include: R421A,

**March*

For more information call: **(800) 791-9**

Message

From: David M. (Max) Williamson [maxwilliamson@williamsonlawpolicy.com]
Sent: 3/5/2020 1:40:53 PM
To: Sheppard, Margaret [Sheppard.Margaret@epa.gov]; Topinka, Natalie [topinka.natalie@epa.gov]
CC: Hall-Jordan, Luke [Hall-Jordan.Luke@epa.gov]; Kenneth Ponder (choice.refrigerants@gmail.com) [choice.refrigerants@gmail.com]
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant
Attachments: ATT00001.txt; EPA SNAP Application Choice R421A HFC (Public Document).pdf; EPA SNAP Listing R-421A 71 FR 56884 (9-28-06) (Public Document).pdf

Ex. 4 CBI

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| | |
|--|---|
|  United States ENVIRONMENTAL PROTECTION AGENCY Washington, DC 20460 | AGENCY USE ONLY OMB Control No.: 2060-0226 Expires: 12/31/2007 |
| SNAP INFORMATION NOTICE For Significant New Alternatives <i>R-421A</i> When completed send this form via U.S. mail to: Or via overnight delivery to: SNAP Document Control Officer SNAP Document Control Officer Office of Air and Radiation, 6205 J U.S. EPA U.S. EPA 8 th Floor 1200 Pennsylvania Ave, NW 1310 L St, NW Washington, DC 20460 Washington, DC 20005 | Date of Receipt: SEP 21 2005 Date 90 Day Review Begins: Date Review Completed: CBI Status: |
| Enter the total number of pages in your SNAP information Notice: <i>49</i> | Document Control Number <i>OAR-2003-118-114</i> |
| INTRODUCTION | |

GENERAL INSTRUCTIONS

This form may be used in conjunction with the Premanufacture Notice for new chemical substances (EPA Form 7710-25 (Rev. 1-19)) to submit chemicals for review under the Significant New Alternatives Policy program as alternatives to Class I and II ozone-depleting substances. In addition to the information provided in the Premanufacture Notice, the Agency is requesting submitters provide information on the following topics. This information will assist EPA in assessing the acceptability of the chemical as an alternative to ozone-depleting substances as required by Section 612 of the Clean Air Act. Please see the Guidance Manual for additional information on overlap between the SNAP and TSCA PMN programs and on completing this form.

To facilitate Agency review of alternatives, both this form and the complete Premanufacture Notice form (including the physical and chemical properties worksheet) must be filled out as completely as possible. Please provide all information requested to the extent that it is known or reasonably ascertainable. Make reasonable estimates if actual data are unavailable.

All submissions must be provided in three complete copies. If information is to be claimed as confidential, all confidential information must be excised from one of the copies, which will be placed in the public file; the other two copies must include the confidential material. If no claims of confidentiality are made for the submission, all copies must be identical.

Anyone submitting information must assert a claim of confidentiality at the time of submission for any data, which is to be treated as Confidential Business Information (CBI). Substantiation of this claim must also be provided at this time. All information claimed as CBI will be treated in a manner consistent with 40 CFR Part 2, Subpart B. Failure to assert a claim of confidentiality at the time of submission may result in disclosure of the information by the Agency without further notice.

Information submitted as CBI may be accessed by companies designated as Authorized Representatives of the United States Environmental Protection Agency (EPA) under an EPA contract for the purpose of assisting EPA in the development and implementation of national regulations for the protection of stratospheric ozone, including the development of the SNAP program. These Authorized Representatives may have access to any information received by the Stratospheric Protection Division within the EPA Office of Atmospheric Programs for use in reviewing the need for possible control of any substance, practice, process or activity that may reasonably be anticipated to affect stratospheric ozone. In general, this information will pertain to the feasibility, costs, and environmental and health impacts of using substitutes for Class I and Class II substances. Access to such information is necessary to ensure that these companies can complete the work required by the contract.

Authorized Representatives of the Administrator are subject to the provision of 42 U.S.C. 7414(c) regarding confidential business information as implemented by 40 CFR 2.301(h)

Part I - GENERAL INFORMATION**Section A - SUBMITTER IDENTIFICATION****1. (a) Person Submitting Notice (in U.S.)**

Kenneth M. Ponder

President

Name of Authorized Official

Title

RMS of Georgia, LLC

Company/Organization

610 McFarland/ 400 Drive, Alpharetta, Georgia 30004

770-777-0597, 770-777-0599

Mailing Address

Telephone & Fax Numbers

ken@rmsgas.com

Email Address

| | |
|--|----------------------------|
| (b) Agent (if applicable) | |
| Name of Authorized Official | Title |
| Company/Organization | |
| Mailing Address | Telephone & Fax Numbers |
| Email Address | |
| (c) Joint Submitter (if applicable) | |
| Name of Authorized Official | Title |
| Company/Organization | |
| Mailing Address | Telephone & Fax Numbers |
| Email Address | |
| 2. Technical Contact (in U.S.) | |
| Kenneth M. Ponder | President |
| Name of Authorized Official | Title |
| RMS of Georgia, LLC | |
| Company/Organization | |
| 610 McFarland/ 400 Drive, Alpharetta, Georgia 30004 | 770-777-0597, 770-777-0599 |
| Mailing Address | Telephone & Fax Numbers |
| ken@rmsgas.com | |
| Email Address | |
| 3. If you have had a prior communication with EPA concerning this notice, note the date and type of communication (letter, phone, etc.) and the EPA staff person's name: Mark (X) if None <input type="checkbox"/> | |

Mark (X) this box if this page contains CBI ☐

Part II - ALTERNATIVE-SPECIFIC INFORMATION

1. Name of chemical (preferably IUPAC nomenclature) and molecular formula.

ASHRAE designated as R421A

R421A is a blend of

R125 (58%) Pentafluoroethane
R134A (42%) 1,1,1,2-Tetrafluoroethane
Proprietary synthetic lubricant

2. Generic name (if chemical name of substitute is declared Confidential Business Information)

Choice R421A (although not confidential it is the name that will be used in the market place)

3. End-uses and ozone-depleting substances (ODSs) being replaced:

- (a) Describe each industrial sector and end-use that may be reasonably anticipated for the alternative.
(b) Identify the ODS and the quantity of substitute needed to replace it for each end-use (replacement ratio).

| | |
|---|--|
| <p>(A) commercial comfort air conditioning (chillers)</p> <p>industrial process air conditioning</p> <p>cold storage warehouses</p> <p>retail food refrigeration</p> <p>water coolers</p> <p>household refrigerators</p> <p>residential dehumidifiers</p> | <p>industrial process refrigeration systems</p> <p>ice skating rinks</p> <p>refrigerated transport</p> <p>vending machines</p> <p>commercial ice machines</p> <p>household freezers</p> <p>residential air conditioning and heat pumps</p> |
|---|--|

(B) R22 CHLORODIFLUOROMETHANE. Ratio of replacement is normally a 1:1

4. Ozone-depleting Potential (ODP):

- (a) Provide the alternative's 100-year ODP relative to CFC-11, known.
(b) Provide source of ODP or any additional data on the ODP of the alternative (e.g. atmospheric lifetime, chlorine or bromine loading potentials). Reference the source of this information and attach any supporting documentation.

(A) 0.000 RELATIVE TO R-11

(B) None

Mark (X) this box if this page contains CBI ☐

Part II - ALTERNATIVE-SPECIFIC INFORMATION (Continued)

5. Global-warming Characteristics

- (a) Provide the alternative's GWP relative to carbon dioxide over 100-, 500-, and 1000-year time horizon, if known.
 (b) If known, provide the alternative's expected impact on energy efficiency relative to the ODS it is replacing (e.g. +/- X%). Also include results of any testing or modeling done (both theoretical and actual testing).
 (c) Provide source of GWP or any additional data on the GWP of the alternative, such as the atmospheric lifetime, infrared absorption spectrum, and infrared absorption capacity.

(A) 100 YEARS= 2170
 500 YEARS=710
 1000 YEARS= UNAVAILABLE

- (B) Equipment design for new equipment could experience an energy savings of +/- 2% or more if properly designed, in retrofit applications we have experienced from 1% to 4 depending on application and design.
 (C) Atmospheric lifetime= (R125/R134A) =32.6/13.6
 GWP reference " Greenhouse Gases and Global warming potential values" excerpt from the inventory of US Greenhouse emissions and sinks: 1990-2000 US EPA April 2002

6. Flammability Concerns:

- (a) Provide the alternative's flash point, the upper and lower flammability limits (UFL & LFL) in percent by volume, the heat of combustion kJ/kg, maximum pressure (PSI), and maximum rate of pressure rise.
 (b) Provide any additional information on flammability concerns. For example, if any abatement techniques are being used to minimize the risks associated with flammable substances or mixtures, detail those techniques below.

(A) None
 Heat of combustion (mj/kg) = 0.894
 Maximum pressure = 568 PSI
 Maximum Pressure rise = unavailable

7. Cost of Alternative:

- (a) Estimate the cost per pound for the alternative chemical. What information was used as the basis for this cost estimate?
 (b) Describe any new equipment and use profiles. If retrofitting of existing equipment is required, detail changes in technologies needed to use the alternative and address any materials compatibility issues. Provide information on any new materials, equipment lifetime, changes in labor, and energy costs.
- (A) Appx \$7.50-9.50 per pound (cost of raw materials, packaging and availability of raw materials ie shortage of R134A)
 (B) This refrigerant blend can be used in any new equipment that uses R22 currently. Also this refrigerant blend can be used as a retrofit refrigerant for R22 without any materials compatibility problems. An energy reduction has been experienced although it varies from equipment type and design. Compressor manufactures and OEM's are slow to test new refrigerant blends unless produced by the larger chemical companies so little information exist that could tell us how efficient this blend could be with proper equipment design. Labor could be greatly reduced if using this alternative in a retrofit situation

Mark (X) this box if this page contains CBI ☐

Part IV - LIST OF ATTACHMENTS

List below any attachments that complete the responses to the questions on this form or that provide additional information that may assist EPA's review of the alternative under Section 612 of the Clean Air Act. Also, provide citation for information already submitted to EPA as part of past regulatory and information activities, as well as for other information that could not be included with this submission. If you have attached continuation pages, describe the Part, Section and question number being continued. Attach additional pages if necessary.

[illegible]

Mark (X) this box if this page contains CBI ☐**Part V - CERTIFICATION**

I certify to the best of my knowledge and belief that:

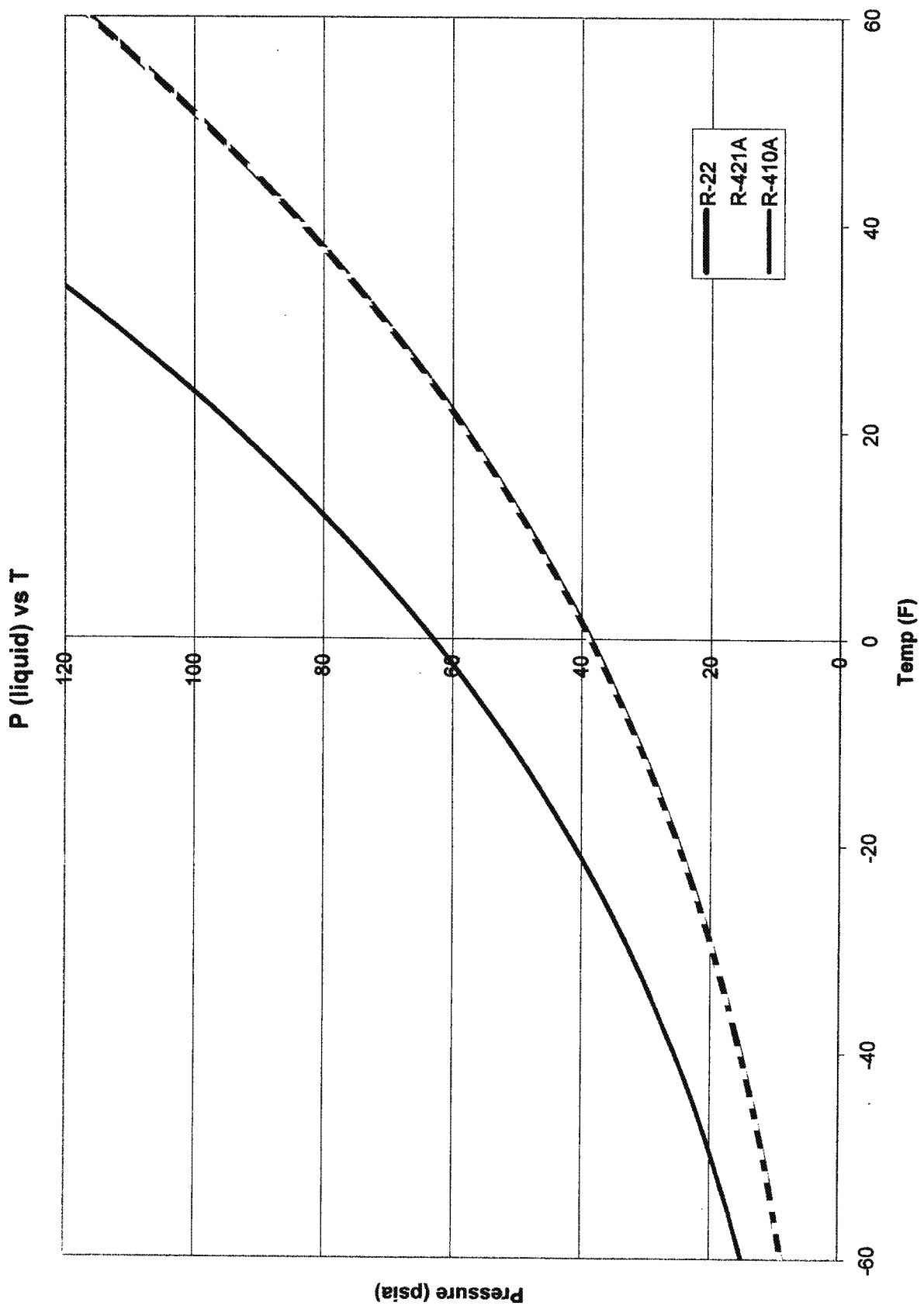
1. All information provided in this notice is complete and truthful as of the date of the submission.
2. I am submitting with this notice all test data in my possession or control and a description of all other data known to or reasonably ascertainable by me.
3. If this is a submission of a new alternative, the company name in Part I, Question 1a of this notice:
 - (a) Intends to manufacture, formulate, import, market, or use a new alternative to a Class I or Class II ozone-depleting substance which is identified in Part I, Section B, Question 2.
 - (b) Seeks an acceptability determination on a new alternative(s) to a Class I or Class II ozone-depleting substance, which is identified in Part I, Section B, Question 2.
4. The accuracy of the statements made in this notice reflects my best prediction of the anticipated facts regarding the alternative described herein. Any knowing and willful misinterpretation is subject to criminal penalty pursuant to section 113(c) of the Clean Air Act and 18 U.S.C. §1001.

Signature and Title of Authorized Official (Original Signature Required):**Date***Benjamin M. Fender**President**7/20/05***Signature of Agent (Where Applicable):****Date**

For persons filing a SNAP Information Notice, the reporting burden is estimated to average 150 hours per year. For persons filing a TSCA/SNAP Addendum, the reporting burden is estimated to average 46 hours per year. Burden means that total time, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instruction; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the U.S. Environmental Protection Agency, Attn: Director, Collection Strategies Division, Office of Information Collection, 1200 Pennsylvania Avenue, NW, Mail Code 2822T, Washington DC, 20460. Please include the EPA Docket ID Number OAR-2004-0077 and OMB Control Number 2060-0226 in any correspondence. Do not send the completed form to this address.





| Temp | Pressure (| Pressure | Density (l | Density (l | Enthalpy (| Enthalpy (| Entropy | Entropy (V |
|------|------------|----------|-----------------------|-----------------------|------------|------------|------------|------------|
| [F] | [psia] | [psia] | [lb/ft ³] | [lb/ft ³] | [Btu/lb] | [Btu/lb] | [Btu/R-lb] | [Btu/R-lb] |
| -60 | 8.81 | 6.469 | 93.38 | 0.1726 | 59.22 | 142.6 | 0.179 | 0.3904 |
| -55 | 10.16 | 7.557 | 92.82 | 0.1896 | 60.61 | 143.3 | 0.1825 | 0.3895 |
| -50 | 11.68 | 8.787 | 92.26 | 0.23 | 62.01 | 144 | 0.1859 | 0.3887 |
| -45 | 13.37 | 10.17 | 91.7 | 0.2639 | 63.42 | 144.8 | 0.1893 | 0.3879 |
| -40 | 15.24 | 11.73 | 91.13 | 0.3017 | 64.83 | 145.5 | 0.1927 | 0.3872 |
| -35 | 17.32 | 13.47 | 90.56 | 0.3436 | 66.25 | 146.2 | 0.196 | 0.3866 |
| -30 | 19.61 | 15.4 | 89.98 | 0.39 | 67.67 | 146.9 | 0.1994 | 0.3859 |
| -25 | 22.13 | 17.55 | 89.39 | 0.4411 | 69.11 | 147.6 | 0.2027 | 0.3854 |
| -20 | 24.9 | 19.93 | 88.8 | 0.4975 | 70.55 | 148.3 | 0.2059 | 0.3848 |
| -15 | 27.93 | 22.55 | 88.2 | 0.5593 | 72 | 149.1 | 0.2092 | 0.3844 |
| -10 | 31.23 | 25.44 | 87.6 | 0.6271 | 73.45 | 149.8 | 0.2124 | 0.3839 |
| -5 | 34.83 | 28.6 | 86.99 | 0.7012 | 74.92 | 150.5 | 0.2157 | 0.3835 |
| 0 | 38.74 | 32.07 | 86.37 | 0.782 | 76.39 | 151.1 | 0.2189 | 0.3831 |
| 5 | 42.98 | 35.84 | 85.74 | 0.87 | 77.87 | 151.8 | 0.2221 | 0.3828 |
| 10 | 47.57 | 39.96 | 85.11 | 0.9657 | 79.36 | 152.5 | 0.2252 | 0.3825 |
| 15 | 52.52 | 44.42 | 84.47 | 1.07 | 80.87 | 153.2 | 0.2284 | 0.3822 |
| 20 | 57.85 | 49.26 | 83.81 | 1.182 | 82.38 | 153.9 | 0.2315 | 0.3819 |
| 25 | 63.58 | 54.49 | 83.15 | 1.304 | 83.9 | 154.5 | 0.2346 | 0.3816 |
| 30 | 69.73 | 60.14 | 82.48 | 1.436 | 85.43 | 155.2 | 0.2378 | 0.3814 |
| 35 | 76.33 | 66.21 | 81.8 | 1.578 | 86.97 | 155.8 | 0.2409 | 0.3812 |
| 40 | 83.38 | 72.75 | 81.1 | 1.732 | 88.52 | 156.4 | 0.244 | 0.381 |
| 45 | 90.9 | 79.76 | 80.4 | 1.898 | 90.09 | 157.1 | 0.247 | 0.3808 |
| 50 | 98.93 | 87.27 | 79.68 | 2.076 | 91.66 | 157.7 | 0.2501 | 0.3806 |
| 55 | 107.5 | 95.3 | 78.94 | 2.269 | 93.26 | 158.3 | 0.2532 | 0.3805 |
| 60 | 116.6 | 103.9 | 78.19 | 2.476 | 94.86 | 158.9 | 0.2562 | 0.3803 |
| 65 | 126.2 | 113 | 77.42 | 2.699 | 96.48 | 159.4 | 0.2593 | 0.3802 |
| 70 | 136.5 | 122.8 | 76.64 | 2.939 | 98.11 | 160 | 0.2624 | 0.38 |
| 75 | 147.3 | 133.1 | 75.84 | 3.197 | 99.76 | 160.5 | 0.2654 | 0.3799 |
| 80 | 158.8 | 144.1 | 75.01 | 3.476 | 101.4 | 161.1 | 0.2685 | 0.3797 |
| 85 | 170.9 | 155.8 | 74.16 | 3.776 | 103.1 | 161.6 | 0.2715 | 0.3795 |
| 90 | 183.7 | 168.1 | 73.29 | 4.099 | 104.8 | 162.1 | 0.2746 | 0.3793 |
| 95 | 197.2 | 181.2 | 72.39 | 4.448 | 106.5 | 162.5 | 0.2776 | 0.3792 |
| 100 | 211.4 | 195.1 | 71.47 | 4.825 | 108.3 | 163 | 0.2807 | 0.3789 |
| 105 | 226.4 | 209.7 | 70.51 | 5.233 | 110.1 | 163.4 | 0.2838 | 0.3787 |
| 110 | 242.2 | 225.1 | 69.51 | 5.676 | 111.9 | 163.7 | 0.2869 | 0.3785 |
| 115 | 258.7 | 241.4 | 68.47 | 6.157 | 113.7 | 164.1 | 0.29 | 0.3782 |
| 120 | 276.1 | 258.6 | 67.39 | 6.681 | 115.5 | 164.4 | 0.2931 | 0.3778 |
| 125 | 294.4 | 276.7 | 66.26 | 7.255 | 117.4 | 164.6 | 0.2963 | 0.3774 |
| 130 | 313.6 | 295.7 | 65.06 | 7.885 | 119.4 | 164.8 | 0.2995 | 0.377 |
| 135 | 333.7 | 315.8 | 63.8 | 8.581 | 121.3 | 165 | 0.3027 | 0.3765 |
| 140 | 354.8 | 336.9 | 62.45 | 9.355 | 123.4 | 165.1 | 0.306 | 0.3759 |
| 145 | 376.8 | 359.1 | 61.01 | 10.22 | 125.5 | 165 | 0.3094 | 0.3751 |
| 150 | 400 | 382.5 | 59.43 | 11.21 | 127.6 | 164.9 | 0.3128 | 0.3743 |
| 155 | 424.2 | 407.2 | 57.7 | 12.34 | 129.9 | 164.7 | 0.3164 | 0.3732 |
| 160 | 449.5 | 433.2 | 55.74 | 13.67 | 132.3 | 164.2 | 0.3202 | 0.3719 |

| Temp (F) | R-410a psia | R-421 psia | R-22 psia | R-410a psig / vacuum in inch water | R-421 | R-22 |
|----------|----------------|---------------|--------------|---------------------------------------|-------|-------|
| -60 | 15.06 | 8.81 | 8.836 | 0.4 | 12.5 | 12.4 |
| -55 | 17.29 | 10.16 | 10.19 | 2.6 | 9.8 | 9.7 |
| -50 | 19.77 | 11.68 | 11.7 | 5.1 | 6.7 | 6.6 |
| -45 | 22.52 | 13.37 | 13.39 | 7.8 | 3.2 | 3.2 |
| -40 | 25.57 | 15.24 | 15.26 | 10.9 | 0.5 | 0.6 |
| -35 | 28.93 | 17.32 | 17.34 | 14.2 | 2.6 | 2.6 |
| -30 | 32.63 | 19.61 | 19.62 | 17.9 | 4.9 | 4.9 |
| -25 | 36.68 | 22.13 | 22.14 | 22.0 | 7.4 | 7.4 |
| -20 | 41.12 | 24.9 | 24.91 | 26.4 | 10.2 | 10.2 |
| -15 | 45.96 | 27.93 | 27.93 | 31.3 | 13.2 | 13.2 |
| -10 | 51.22 | 31.23 | 31.23 | 36.5 | 16.5 | 16.5 |
| -5 | 56.94 | 34.83 | 34.82 | 42.2 | 20.1 | 20.1 |
| 0 | 63.14 | 38.74 | 38.73 | 48.4 | 24.0 | 24.0 |
| 5 | 69.84 | 42.98 | 42.96 | 55.1 | 28.3 | 28.3 |
| 10 | 77.08 | 47.57 | 47.54 | 62.4 | 32.9 | 32.8 |
| 15 | 84.87 | 52.52 | 52.48 | 70.2 | 37.8 | 37.8 |
| 20 | 93.24 | 57.85 | 57.79 | 78.5 | 43.2 | 43.1 |
| 25 | 102.2 | 63.58 | 63.51 | 87.5 | 48.9 | 48.8 |
| 30 | 111.9 | 69.73 | 69.65 | 97.2 | 55.0 | 55.0 |
| 35 | 122.2 | 76.33 | 76.22 | 107.5 | 61.6 | 61.5 |
| 40 | 133.2 | 83.38 | 83.26 | 118.5 | 68.7 | 68.6 |
| 45 | 144.9 | 90.9 | 90.76 | 130.2 | 76.2 | 76.1 |
| 50 | 157.4 | 98.93 | 98.76 | 142.7 | 84.2 | 84.1 |
| 55 | 170.7 | 107.5 | 107.3 | 156.0 | 92.8 | 92.6 |
| 60 | 184.8 | 116.6 | 116.3 | 170.1 | 101.9 | 101.6 |
| 65 | 199.8 | 126.2 | 125.9 | 185.1 | 111.5 | 111.2 |
| 70 | 215.7 | 136.5 | 136.1 | 201.0 | 121.8 | 121.4 |
| 75 | 232.5 | 147.3 | 146.9 | 217.8 | 132.6 | 132.2 |
| 80 | 250.3 | 158.8 | 158.3 | 235.6 | 144.1 | 143.6 |
| 85 | 269.1 | 170.9 | 170.4 | 254.4 | 156.2 | 155.7 |
| 90 | 289 | 183.7 | 183.1 | 274.3 | 169.0 | 168.4 |
| 95 | 310 | 197.2 | 196.5 | 295.3 | 182.5 | 181.8 |
| 100 | 332 | 211.4 | 210.6 | 317.3 | 196.7 | 195.9 |
| 105 | 355.3 | 226.4 | 225.5 | 340.6 | 211.7 | 210.8 |
| 110 | 379.8 | 242.2 | 241.1 | 365.1 | 227.5 | 226.4 |
| 115 | 405.6 | 258.7 | 257.5 | 390.9 | 244.0 | 242.8 |
| 120 | 432.7 | 276.1 | 274.7 | 418.0 | 261.4 | 260.0 |
| 125 | 461.2 | 294.4 | 292.7 | 446.5 | 279.7 | 278.0 |
| 130 | 491.2 | 313.6 | 311.6 | 476.5 | 298.9 | 296.9 |
| 135 | 522.7 | 333.7 | 331.4 | 508.0 | 319.0 | 316.7 |
| 140 | 555.9 | 354.8 | 352.1 | 541.2 | 340.1 | 337.4 |
| 145 | 590.7 | 376.8 | 373.7 | 576.0 | 362.1 | 359.0 |
| 150 | 627.5 | 400 | 396.4 | 612.8 | 385.3 | 381.7 |

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- ✓ R-421A can be used in compressors designed for R22.
- ✓ R-421A can be used with Mineral, AB or POE oils.
- ✓ R-421A is non-flammable and rated A1 by ASHRAE
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- ✓ R-421A can be topped off following repair of a system leak.
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Call 1-888-659-COLD**

| | |
|-------------------------------------|---------------|
| | R-421A |
| | |
| ODP relative to R-11 | 0.000 |
| | |
| Atmospheric Lifetime (R-125/R-134a) | 32.6/13.6 |
| | |
| GWP over 100 yrs | 2170 |
| | |
| GWP over 500 yrs | 710 |
| | |
| GWP over 1000 yrs | unavailable |
| | |
| Flashpoint | none |
| | |
| UFL (% vol) | none |
| | |
| LFL (% vol) | none |
| | |
| Heat of Combustion (MJ/kg) | 0.894 |
| | |
| Max Pressure (psi) | 568 |
| | |
| Max Pressure Rise (psi) | unavailable |

GWP reference

"Greenhouse Gases and Global Warming Potential Values"

Excerpt from the Inventory of US Greenhouse Emissions and Sinks:1990-2000

US EPA April 2002

R-421A

| | Mass % | MW | Mol | Mol% |
|--------|--------|--------|----------|-------|
| R-134a | 42 | 102.03 | 0.411644 | 46.00 |
| R-125 | 58 | 120.02 | 0.483253 | 54.00 |
| | | | 0.894896 | |

ODP Calc

| | Mass % | GWP 100 yrs | |
|--------|--------|-------------|------|
| R-134a | 42 | 1300 | 546 |
| R-125 | 58 | 2800 | 1624 |
| | | | 2170 |

| | Mass % | GWP 500 yrs | |
|--------|--------|-------------|-------|
| R-134a | 42 | 420 | 176.4 |
| R-125 | 58 | 920 | 533.6 |
| | | | 710 |

HOC

| | Mass % | HOC (MJ/kg) | |
|--------|--------|-------------|-------|
| R-134a | 42 | 4.2 | 1.764 |
| R-125 | 58 | -1.5 | -0.87 |
| | | | 0.894 |

| | |
|-------------------------------------|---------------|
| | R-421A |
| | |
| ODP relative to R-11 | 0.000 |
| | |
| Atmospheric Lifetime (R-125/R-134a) | 32.6/13.6 |
| | |
| GWP over 100 yrs | 2170 |
| | |
| GWP over 500 yrs | 710 |
| | |
| GWP over 1000 yrs | unavailable |
| | |
| Flashpoint | none |
| | |
| UFL (% vol) | none |
| | |
| LFL (% vol) | none |
| | |
| Heat of Combustion (MJ/kg) | 0.894 |
| | |
| Max Pressure (psi) | 568 |
| | |
| Max Pressure Rise (psi) | unavailable |

GWP reference

"Greenhouse Gases and Global Warming Potential Values"

Excerpt from the Inventory of US Greenhouse Emissions and Sinks: 1990-2000

US EPA April 2002

R-421A

| | Mass % | MW | Mol | Mol% |
|--------|---------------|-----------|------------|-------------|
| R-134a | 42 | 102.03 | 0.411644 | 46.00 |
| R-125 | 58 | 120.02 | 0.483253 | 54.00 |
| | | | 0.894896 | |

ODP Calc

| | Mass % | GWP 100 yrs | |
|--------|---------------|--------------------|------|
| R-134a | 42 | 1300 | 546 |
| R-125 | 58 | 2800 | 1624 |
| | | | 2170 |

| | Mass % | GWP 500 yrs | |
|--------|---------------|--------------------|-------|
| R-134a | 42 | 420 | 176.4 |
| R-125 | 58 | 920 | 533.6 |
| | | | 710 |

HOC

| | Mass % | HOC (MJ/kg) | |
|--------|---------------|--------------------|-------|
| R-134a | 42 | 4.2 | 1.764 |
| R-125 | 58 | -1.5 | -0.87 |
| | | | 0.894 |



TEST REPORT
INTERTEK TESTING SERVICES
1717 Arlingate Lane Columbus, Ohio 43228

TEST REPORT NO.: 3048497
EPA SNAP Application section 1

RENDERED TO:

REFRIGERANT MANAGEMENT SERVICES
610 McFARLAND/400 DRIVE
ALPHARETTA, GEORGIA 30004

STANDARD AND TEST USED: ANSI/ASHRAE 34-1997 entitled "Designation and Safety Classification of Refrigerants", BSR/ASHRAE addendum p to ANSI/ASHRAE Standard 34 entitled "Number Designation and Safety Classification of Refrigerants"

AUTHORIZATION: The test was authorized by Mr. Ken Ponder for EPA SNAP Application.

SPECIMEN DESCRIPTION: A zeotropic blend of R-134a and R-125 and proprietary lubricant.

INTRODUCTION: This report describes the physical, fractionation and flammability properties of a refrigerant blend of 42.0% R-134a and 58.0% R-125 as per the stated above standards. The samples under test were received on 09/19/03, and the test evaluations were conducted at Intertek Testing Services located in Columbus, OH between 09/22/03 and 09/25/03.

CONCLUSION: The stated blend, submitted by Refrigerant Management Services, was evaluated in accordance with ANSI/ASHRAE 34-1997 entitled "Designation and Safety Classification of Refrigerants", BSR/ASHRAE addendum p to ANSI/ASHRAE Standard 34 entitled "Number Designation and Safety Classification of Refrigerants". Test data sheets (appendix A), pages 2-4 is the entirety of this report.

Test Performed by:

Report Approved by:

Aaron Payne
Chemist
Analytical Laboratory

John Senediak
Laboratory Manager
Analytical Laboratory

EPA SNAP Application

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All services undertaken subject to the following general policy: Reports are submitted for exclusive use of the clients to whom they are addressed. Their significance is subject to the adequacy and representative character of the samples and to

| ASHRAE 34 Section | Description | Value | Reference |
|----------------------|---|--|-----------|
| | Refrigerant Data | | |
| | Individual Compounds | | |
| a) | Chemical Name | 1,1,1,2-tetrafluoroethane | 6 |
| b) | Chemical Formula | CH ₂ FCF ₃ | 3 |
| c) | Chemical Abstracts Registry Number | 811-97-2 | 1 |
| d) | Molecular mass | 102.03 g/mol | 2 |
| e) | Freezing Point / Triple point | -103.3°C (-153.94°F) | 2 |
| f) | Normal Boiling Point (at 101 kPa) | -26.07°C (-14.93°F) | 2 |
| g) | Saturation vapor pressure at 20°C (68°F) at 60°C (140°F) | 571.7 kPa (82.90 psia) 1682 kPa (244.0 psia) | 2 |
| h) | Temperature at critical point | 101.03°C (213.91°F) | 2 |
| i) | Specific Volume at critical point | 1.954 L/kg (0.0313 cf/lb) | 2 |
| j) | Uses and typical application temperatures | Domestic and commercial refrigeration, automobile air conditioners, transport refrigeration, centrifugal chillers; primary alternative for refrigerants 12 and 500; blend component for alternatives including 404A, 407A-D, 413A, 416A, and others. | 6 |
| | | | |
| a) | Chemical Name | Pentafluoroethane | 6 |
| b) | Chemical Formula | CHF ₂ CF ₃ | 3 |
| c) | Chemical Abstracts Registry Number | 354-33-6 | 2 |
| d) | Molecular mass | 120.02 g/mol | 2 |
| e) | Freezing Point / Triple point | -100.63°C (-149.13°F) | 2 |
| f) | Normal Boiling Point (at 101 kPa) | -48.14°C (-54.66°F) | 2 |
| g) | Saturation vapor pressure at 20°C (68°F) at 60°C (140°F) | 1205 kPa (174.7 psia) 3167 kPa (459.4 psia) | 2 2 |
| h) | Temperature at critical point | 66.18°C (151.12°F) | 2 |
| i) | Specific Volume at critical point | 1.750 L/kg (0.0280 cf/lb) | 2 |
| j) | Uses and typical application temperatures | Blend component for refrigerants 407, 408, 410, 507 and others. | 6 |
| 8.5.2.2 | Azeotropic Blend | Non Applicable | 6 |

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EPA SNAP Application

| Part 1 | Description | Value | Reference |
|--------|---|--|-----------|
| | Zeotropic Blend | | |
| a) | Formulation | 42.0% by weight R-134a (+1.0/- 1.0%) 58.0% by weight R-125 (+1.0/-1.0%) 1.5% by weight Lubricant (+1.0-1.0) | 6 |
| b) | Molecular Mass as formulated | 111.74 g/mol | 7 |
| c) | Molecular Mass of the vapor at 60°C (140°F) | 113.15 g/mol | 7 |
| d) | Bubble point temperature at 101 kPa (14.7psia) | -40.84°C (-41.51°F) | 2 |
| e) | Dew point at 101 kPa (14.7 psia) | -35.49°C (-31.88°F) | 2 |
| f) | Maximum temperature glide at the normal boiling point and at 20°C (68°F) at normal B.P. at 20°C (68°F) | 5.35°C (9.63°F) 3.67°C (6.61°F) | 6 6 |
| g) | Vapor composition for the as formulated saturated liquid composition at the normal boiling point and at 20°C (68°F). at normal B.P at 20°C (68°F) | R-134a 20.71%, R-125 79.29% by weight R-134a 28.87%, R-125 71.13% by weight | 2 2 |
| h) | Dew Point vapor pressure at 20°C (68°F) Dew Point vapor pressure at 60°C (140°F) | 912.1 kPa (132.3 psia) 2446 kPa (354.8 psia) | 2 2 |
| i) | Latent heat of vaporization at 60°C (140°F) | 95.8 kJ/kg | 7 |
| j) | Specific heat ratio of the vapor at 60°C (140°F) | 1.784 | 7 |
| k) | Temperature at the critical point | 78.5°C (173.3°F) | 7 |
| l) | Specific volume at the critical point | 1.30 L/kg | 7 |
| m) | Uses and typical application temperatures | Used as a substitute for R-22 in medium temperature refrigeration systems in residential, commercial, and industrial applications. | 6 |
| n) | Proposed composition tolerances for classification | R-134a = 41.0 – 43.0% by weight R-125 = 59.0 – 57.0% by weight | 6 |
| o) | Worst case formulation (WCF) of blend | R-134a = 43.0% by weight R-125 = 57.0% by weight | 7 |
| p) | Worst case fractionated formulation (WCFF) of the blend. | Non applicable | |
| ** | Heat of Combustion for WCF at 25°C, 1 atm. | 951 kJ/kg | 7 |

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Fractional and Flammability

This is not a requirement since both components of the blend are class 1 refrigerants per ASHARE 34 addendum p section 6.1.3.

References

1. Calm, J.M., ARTI Refrigerant Database, Air-Conditioning and Refrigeration Technology Institute, Arlington Va., version 1.31.
2. "NIST Thermodynamic Properties of Refrigerants and Refrigerant Mixtures Database" (REFPROP), version 6.01. National Institute of Standards and Technology Standard Reference Data Program. Gaithersburg, MD 20899
3. R.C. Downing, "Fluorocarbon Refrigerants Handbook". New Jersey: Prentice Hall (1988)
4. "NIST Leak and Recharge Simulation Program for Refrigerant Mixtures" (REFLEAK), version 2.0 Distributed by National Institute of Standards and Technology Standard Reference Data Program. Gaithersburg, MD 20899
5. J.M. Calm and G.C. Hourahan, **Refrigerant Data Summary**, Engineered Systems, 18(11): 74-88, November 2001.
6. Information supplied by client (Refrigerant Management Services of Georgia).
7. Data was calculated by ITS Laboratories utilizing data and formulas from above reference materials.

An independent organization testing for safety, performance, and certification.

All services undertaken subject to the following general policy: Reports are submitted for exclusive use of the clients to whom they are addressed. Their significance is subject to the adequacy and representative character of the samples and to



TEST REPORT
INTERTEK TESTING SERVICES
1717 Arlingate Lane Columbus, Ohio 43228

Order No.: 3048497

Date: September 25, 2003

TEST REPORT NO.: 3048497**RENDERED TO:**

REFRIGERANT MANAGEMENT SERVICES
610 McFARLAND/400 DRIVE
ALPHARETTA, GEORGIA 30004

STANDARD AND TEST USED: ANSI/ASHRAE 34-1997 entitled "Designation and Safety Classification of Refrigerants", BSR/ASHRAE addendum p to ANSI/ASHRAE Standard 34 entitled "Number Designation and Safety Classification of Refrigerants"

AUTHORIZATION: The test was authorized by Mr. Ken Ponder.

SPECIMEN DESCRIPTION: A zeotropic blend of R-134a and R-125.

INTRODUCTION: This report describes the physical, fractionation and flammability properties of a refrigerant blend of 42.0% R-134a and 58.0% R-125 as per the stated above standards. The samples under test were received on 09/19/03, and the test evaluations were conducted at Intertek Testing Services located in Columbus, OH between 09/22/03 and 09/25/03.

CONCLUSION: The stated blend, submitted by Refrigerant Management Services, was evaluated in accordance with ANSI/ASHRAE 34-1997 entitled "Designation and Safety Classification of Refrigerants", BSR/ASHRAE addendum p to ANSI/ASHRAE Standard 34 entitled "Number Designation and Safety Classification of Refrigerants". Test data sheets (appendix A), pages 2-4 is the entirety of this report.

Test Performed by:

Report Approved by:

Aaron Payne
Chemist
Analytical Laboratory

John Senediak
Laboratory Manager
Analytical Laboratory

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All services undertaken subject to the following general policy: Reports are submitted for exclusive use of the clients to whom they are addressed. Their significance is subject to the adequacy and representative character of the samples and to

Appendix A (cont)

| ASHRAE 34 Section | Description | Value | Reference |
|-------------------|--|--|-----------|
| 8.5.2.3 | Zeotropic Blend | | |
| a) | Formulation | 42.0% by weight R-134a (+1.0/- 1.0%) 58.0% by weight R-125 (+1.0/-1.0%) | 6 |
| b) | Molecular Mass as formulated | 111.74 g/mol | 7 |
| c) | Molecular Mass of the vapor at 60°C (140°F) | 113.15 g/mol | 7 |
| d) | Bubble point temperature at 101 kPa (14.7 psia) | -40.84°C (-41.51°F) | 2 |
| e) | Dew point at 101 kPa (14.7 psia) | -35.49°C (-31.88°F) | 2 |
| f) | Maximum temperature glide at the normal boiling point and at 20°C (68°F) at normal B.P. at 20°C (68°F) | 5.35°C (9.63°F) 3.67°C (6.61°F) | 6 6 |
| g) | Vapor composition for the as formulated saturated liquid composition at the normal boiling point and at 20°C (68°F). at normal B.P. at 20°C (68°F) | R-134a 20.71%, R-125 79.29% by weight R-134a 28.87%, R-125 71.13% by weight | 2 2 |
| h) | Dew Point vapor pressure at 20°C (68°F) Dew Point vapor pressure at 60°C (140°F) | 912.1 kPa (132.3 psia) 2446 kPa (354.8 psia) | 2 2 |
| i) | Latent heat of vaporization at 60°C (140°F) | 95.8 kJ/kg | 7 |
| j) | Specific heat ratio of the vapor at 60°C (140°F) | 1.784 | 7 |
| k) | Temperature at the critical point | 78.5°C (173.3°F) | 7 |
| l) | Specific volume at the critical point | 1.30 L/kg | 7 |
| m) | Uses and typical application temperatures | Used as a substitute for R-22 in medium temperature refrigeration systems in residential, commercial, and industrial applications. | 6 |
| n) | Proposed composition tolerances for classification | R-134a = 41.0 – 43.0% by weight R-125 = 59.0 – 57.0% by weight | 6 |
| o) | Worst case formulation (WCF) of blend | R-134a = 43.0% by weight R-125 = 57.0% by weight | 7 |
| p) | Worst case fractionated formulation (WCFF) of the blend. | Non applicable | |
| ** | Heat of Combustion for WCF at 25°C, 1 atm. | 951 kJ/kg | 7 |

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Fractional and Flammability


This is not a requirement since both components of the blend are class 1 refrigerants per ASHARE 34 addendum p section 6.1.3.

References

1. Calm, J.M., ARTI Refrigerant Database, Air-Conditioning and Refrigeration Technology Institute, Arlington Va., version 1.31.
2. "NIST Thermodynamic Properties of Refrigerants and Refrigerant Mixtures Database" (REFPROP), version 6.01. National Institute of Standards and Technology Standard Reference Data Program. Gaithersburg, MD 20899
3. R.C. Downing, "Fluorocarbon Refrigerants Handbook". New Jersey: Prentice Hall (1988)
4. "NIST Leak and Recharge Simulation Program for Refrigerant Mixtures" (REFLEAK), version 2.0 Distributed by National Institute of Standards and Technology Standard Reference Data Program. Gaithersburg, MD 20899
5. J.M. Calm and G.C. Hourahan, **Refrigerant Data Summary**, Engineered Systems, 18(11): 74-88, November 2001.
6. Information supplied by client (Refrigerant Management Services of Georgia).
7. Data was calculated by ITS Laboratories utilizing data and formulas from above reference materials.

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| | | | |
|---|--|--|--|
|  <p style="text-align: center;">United States ENVIRONMENTAL PROTECTION AGENCY Washington, DC 20460</p> | <p>AGENCY USE ONLY OMB Control No.: 2060-0226 Expires: 12/31/2007</p> | | |
| <p style="text-align: center;">TSCA/SNAP ADDENDUM for Significant New Alternatives</p> | <p>Date of Receipt:</p> | | |
| <p>When completed send this form via U.S. mail to: Or via overnight delivery to:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> SNAP Document Control Officer Office of Air and Radiation, 6205 J U.S. EPA 1200 Pennsylvania Ave, NW Washington, DC 20460 </td> <td style="width: 50%; vertical-align: top;"> SNAP Document Control Officer U.S. EPA 8th Floor 1310 L St, NW Washington, DC 20005 </td> </tr> </table> | SNAP Document Control Officer Office of Air and Radiation, 6205 J U.S. EPA 1200 Pennsylvania Ave, NW Washington, DC 20460 | SNAP Document Control Officer U.S. EPA 8 th Floor 1310 L St, NW Washington, DC 20005 | <p>Date 90 Day Review Begins:</p> <p>Date Review Completed:</p> <p>PMN Document Control Number</p> |
| SNAP Document Control Officer Office of Air and Radiation, 6205 J U.S. EPA 1200 Pennsylvania Ave, NW Washington, DC 20460 | SNAP Document Control Officer U.S. EPA 8 th Floor 1310 L St, NW Washington, DC 20005 | | |
| <p>Enter the total number of pages in your SNAP information Notice:</p> | <p>SNAP Document Control No.</p> | | |
| | | | |

GENERAL INSTRUCTIONS

This form may be used to submit information under the Significant New Alternatives Policy (SNAP) program for the review of alternatives to class I and class II ozone-depleting substances (ODS) under section 612 of the Clean Air Act. Submitters are required to provide this information on new substitutes to assist the Agency in assessing the acceptability of chemicals or processes that are considered alternatives for ODSs. A separate notice must be filed for each alternative you are submitting.

All submissions must be provided in three complete copies. If information is to be claimed as confidential, all confidential information must be excised from one of the copies, which will be placed in the public docket; the other two copies must include the confidential material. If no claims of confidentiality are made for the submission, all copies must be identical.

The attached "Guidance Manual for the SNAP Information Notice" is designed to assist applicants in completing this form. The manual provides instructions on submitting a SNAP notice, asserting confidentiality claims, completing the notice form, sector-specific data requirements, and submitting test data and supplemental information.

To facilitate Agency review of alternatives, this form must be filled out as completely as possible. Please provide all information requested to the extent that it is known or reasonably ascertainable. Make reasonable estimates if actual data is unavailable.

TYPE OF NOTICE (Check only one box)

Select the appropriate box identifying the type of notice submitted:

- Manufacturer Submission: New alternative, Substance, or Formulation ☒
- Petition: New alternative, Substance, or Formulation ☐
- Petition: Revision of the Existing SNAP list ☐
- Petition: Request to Grandfather Use of An Unacceptable Substitute ☐

Part I - GENERAL INFORMATION

You must provide the identity of the alternative chemical of processes and the identity and percentages of all components in a blend and/or process, even if you claim the identity as confidential. You may authorize another person to submit the identity for you, but your submission will not be complete and review cannot begin until EPA receives this information.

You may need additional copies of Part II if there are several manufacturing, processing, or use operations that you will describe in this notice. Please reproduce these sections as needed.

If your substitute is also subject to review under FIFRA, provide the FIFRA Registration Number:

Part II - ALTERNATIVE-SPECIFIC INFORMATION

Please indicate the sector(s) for which you are submitting information on the substitute by checking the appropriate boxes:

- Refrigeration and Air Conditioning ☒
- Foam Blowing ☐
- Solvent Cleaning ☐
- Fire Extinguishing ☐
- and Explosion Prevention ☐
- Sterilization ☐
- Aerosols ☐
- Adhesives, Coatings, and Inks ☐
- Tobacco Expansion ☐
- Pesticides ☐

Form 1265-93 (Revised 1/05)
Previous editions are obsolete

Part III - RELEASE AND EXPOSURE DATA

Please reproduce additional copies of Part III as necessary.

Part IV - LIST OF ATTACHMENTS

Please attach additional sheets if you do not have enough space on the form to fully answer a question. Label each continuation sheet with the corresponding section heading and the question. In part IV, list these attachments and any test data, other data, or any optional information that you include in this notice.

TEST DATA AND OTHER DATA

You are required to submit all test data in your possession or control and to provide a description of all other data known to you if these data are related to the health and environmental effects of the manufacture, processing, distribution in

commerce, use, or disposal of the alternative. Standard literature citations may be submitted if they do not appear in the open scientific literature. Complete test data (in English), not summaries of data, must be submitted if they do not appear in the open literature. The following are test data and other data that might be submitted (see the Guidance Manual for a more complete list of data to be submitted.) Please indicate test data to be included in your submission notice by checking the appropriate boxes:

| | | |
|--|---|-----------------------------|
| Health Effects Data | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Flammability Data | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Environmental Effects Data | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Environmental Fate Data | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Risk Assessments | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Test Data Not in the Possession/ Control of the Submitter | | |
| No Other Data | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

[illegible]

MATERIAL SAFETY DATA SHEET

(In compliance with OSHA Communication Standard 09 CFR 1910.1200 Dept. of Labor)

Section I Product Identification

Product Name: CHOICE R-421A
 Chemical Name: Compound: Pentafluoroethane & 1,1,1,2-tetrafluoroethane (58/42)%
 Chemical Family: Refrigerant Gas for Air Conditioning and Refrigeration Systems
 Contact: RMS of Georgia, LLC
 Address: 610 McFarland 400 Drive, Alpharetta, GA 30004
 Telephone #: 1-800-347-5872 Fax # 770-777-0599
 Emergency #: Chem Trac 1-800-424-9300

Section II Hazardous Ingredients/ Identity Information

| Hazardous Components: | ACGIH TLV-C (PPM V/V) | OSHA PEL |
|---------------------------------|-----------------------|------------|
| R134a 1,1,1,2-tetrafluoroethane | 1000 | not listed |
| R125 Pentafluoroethane | 1000 | not listed |

Section III Physical/ Chemical

| | |
|---|--------------------------|
| Boiling Point: -40.4°F | Solubility in water: nil |
| Vapor pressure: 136.5 psig at 70°F | Volatiles 100% |
| Specific gravity (H ₂ O=1): | Melting point...gas |
| Appearance/ Odor: Clear | |
| Freezing Point: N/A | |
| Description: A blend of R125 and R134a with a proprietary lubricant | |

Section IV Health Hazard Data

| Chemical Name | CAS No. | Wt. % | Exposure Limit * |
|---------------------------|---------------|-------|------------------|
| 1,1,1,2-tetrafluoroethane | 811-97-2 | 42% | 1000 (WEEL v/v) |
| Pentafluoroethane | 354-33-6 | 58% | 1000 (WEEL v/v) |
| Synthetic Alkylate | non-regulated | 5-2% | |

If in Eyes: Avoid eye contact. Direct contact with liquified/ pressurized gas or frost particles may cause frostbite and possibly severe and permanent eye damage.

If on Skin: Avoid direct skin contact. Direct contact with liquified/pressurized gas or frost particles may cause severe burns or frostbite ("cold" burns).

If Inhaled: Avoid inhalation of high concentrations of gas. Acute overexposure may result in irritation of the throat and lungs. High concentrations in confined areas can displace oxygen and can cause dizziness, unconsciousness, and even death with longer exposure. Long-term exposure to this product may cause symptoms of drowsiness, dullness, numbness, headache, dizziness, and nausea and increase heart rate.

Ingestion: Not applicable by this route of exposure. This product is regarded as having a low order of toxicity.

Health Effects Data: Inhalation of this product at high concentrations is capable of producing damage to the central nervous system, cardiovascular system, respiratory system, and skin; however, the heart appears to be the most sensitive organ. This is not carcinogenic, mutagenic, a skin sensitizer, or a reproductive toxin according to the OSHA Hazard Communication Standard (HCS) {29 CFR 1910.1200}.

Section V Fire & Explosion Hazard Data

Flash Point: Non-Flammable - - Flammable Limits LEL: N/A UEL: N/A

Extinguishing Media: Extinguishing Media is generally not necessary. This material is nonflammable.

Special Fire Fighting Procedures: Use water to keep fire-exposed containers cool and to protect personnel during shutoff. If possible, stop the flow of gas or vapor, then fight fire according to types of burning material. If flow cannot be safely shut off, allow fire to burn itself out. Cool cylinders with water spray until well after fire is out. Upon exposure to intense heat or flame, container may vent rapidly or explode.

Unusual Fire and Explosion Hazards: Gas vapors can collect and remain in low spots even after the source of gas has been eliminated. Contact with certain reactive metals may result in formation of explosive or exothermic reactions under specific conditions (e.g. very high temperatures and/or appropriate pressures). Caution: Contents are under pressure and can explode when exposed to heat or flames.

Section VI Reactivity Data

Stability: Stable

Incompatibility (Materials To Avoid): Finely divided metals, magnesium and alloys containing more than 2% magnesium. Can react violently in the presence of alkali or alkali metals such as sodium, potassium or barium.

Hazardous Polymerization: NONE

Conditions to avoid: High temperatures, above 173.3° F

Hazardous Decomposition Products: CO, CO₂, Hydrogen chloride gas, hydrofluoric acid fumes, halogen acids.

Section VII Emergency/ First Aid Procedures:

If in Eyes: Flush with water. (At least 15 minutes) Get medical attention if irritation persists.

If on Skin: If skin is exposed to liquified/ pressurized gas or frost particles, soak with warm water. If frostbite occurs, do not put frozen area into hot water or place in front of a heat source.

If Swallowed: Seek medical help. Do not induce vomiting.

If Inhaled: Remove person to fresh air. Seek medical help if irritation persists. If chronically abused and breathing stops, give artificial respiration.

Section VIII Precautions For Safe Handling And Use

If Material is Released Or Spilled: Evacuate all personnel from effected area. Use appropriate protective equipment. If leak is in user's equipment, be certain to purge piping with an inert gas prior to attempting repairs.

Waste Disposal Method: Dispose of according to local and state laws. Wrap in newspaper and dispose of in trash. Discarded product is not a hazardous waste under RCR, 40 CFR 261. This material is not specifically listed as hazardous waste but can be classified as hazardous waste if contaminated with other hazardous materials.

Section IX Special Handling/ Precautions

Storage: Never expose cylinders to excessive heat. Cylinders should be stored in a well-ventilated area. Storage should not exceed 50° C or 130°F and should be free of oxidizers or corrosive materials. Handling: Do not drag, roll, or slide cylinders. Secure cylinder at all times. Use separate control valves or pressure reducing regulators to safely discharge rate. Compressed gas cylinders must not be filled by the owner or with the owner's consent. This is a violation of federal law.

Section X Special Protection Data/ Control Measures

Respiratory: None for proper use. Maintain adequate ventilation. Preferably, use outdoors.

Eyes: Safety glasses are needed.

Gloves: Use butyl or neoprene rubber gloves for prolonged contact.

Other Equipment: Safety Shoes

Section XI Special Precautions

The information contained herein is considered accurate. However no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the user, thereof.

The vendor assumes no responsibility for injury, or damage resulting from the inappropriate use of this product.

California SARA Information- Full Disclosure Data.

This product contains no known or suspected carcinogens, pathogens or mutagens. The product contains 0% volatile organic chemicals. Contents: 134a Refrigerant, R125 Refrigerant

Section XII Transportation Information

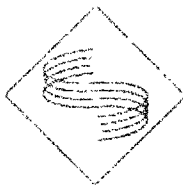
DOT Shipping Information: Proper Shipping Name- Refrigerant Gases, n.o.s., (1,1,1,2-tetrafluoroethane & Pentafluoroethane) 2.2 UN1078

Shipping Label/ Placard Non-Flammable Gas- Hazard Class 2.2

NFPA Rating 0 = lowest, 4 = highest

| | |
|--------------|---|
| Health | 0 |
| Flammability | 0 |
| Reactivity | 1 |
| Special | 1 |

This product safety data sheet is offered solely for your information, consideration and investigation. RMS of Georgia, LLC provides no warranties either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein.



Shrieve Chemical Products

MATERIAL SAFETY DATA SHEET

24-HOUR EMERGENCY ASSISTANCE

CHEMTREC: 800-424-9300

SHRIEVE: 800-367-4226

GENERAL MSDS ASSISTANCE

SHRIEVE: 281-367-4226

For hazard identification, acute and chronic health effects refer to the discussion in Section 3.

| SECTION 1 | NAME |
|-----------------|--------------------|
| PRODUCT | Zerol 30 |
| CHEMICAL NAME | Synthetic Alkylate |
| CHEMICAL FAMILY | HYDROCARBON |

| SECTION 2 | PRODUCT/INGREDIENT |
|-----------|--------------------|
|-----------|--------------------|

THIS PRODUCT IS CONSIDERED AS NON-HAZARDOUS (SEE SECTION 14).

| SECTION 3 | HAZARD IDENTIFICATION |
|---------------------------|-----------------------|
| EMERGENCY OVERVIEW | |

Appearance: Clear yellow liquid

Odor: Odorless

| | | | |
|---|---------------------|---|--------------------------|
| Hazardous Material Information System (United States) | Health | 1 | National Fire Protection |
| | | 1 | Association NFPA |
| | Reactivity | 0 | (United States) |
| | Personal protection | | |

POTENTIAL HEALTH EFFECTS

Primary Route of Exposure: Skin

EFFECTS OF OVEREXPOSURE

EYES: Expected to cause no more than minor eye irritation. Application of a similar product into the eyes of rabbits produced very slight membrane irritation without corneal injury. Avoid eye contact as good industrial practice.

SKIN: Not a primary skin irritant but may cause skin irritation on repeated or prolonged contact. Application of a similar product onto the skin of rabbits produced slight erythemia and edema.

INHALATION: Avoid breathing vapor or mist. Under normal use conditions, this product is not an inhalation hazard. Prolonged exposure to vapors may cause dizziness and headaches.

INGESTION: May cause nausea. Not expected to be acutely toxic by ingestion.

There is no evidence that this product aggravates an existing medical condition.

OTHER REMARKS: None.

SECTION 4 FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding the eyelids open. If irritation persists, see a physician.

SKIN: Remove contaminated clothing. Wash skin thoroughly with soap and water. Launder contaminated clothing. See a doctor if irritation persists.

INGESTION: If swallowed, call a physician immediately. ONLY induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person. If medical advice cannot be obtained, take the person, product container and MSDS to the nearest medical emergency center.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration and seek medical attention immediately. Remove material from eyes, skin and clothing.

SECTION 5 FIRE-FIGHTING MEASURES

Flash Point (degrees C), Cleveland Open Cup
>130C

Flammable Limits % (Lower-Upper):

Lower: Not determined

Upper: Not determined.

Recommended Fire Extinguishing Agents and Special Procedures:

Use water spray, dry chemical, foam, or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

Unusual or Explosive Hazards: None.

Special Protective Equipment for Firefighters:

Wear full protective clothing and positive pressure breathing apparatus.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Procedures in Case of Accidental Release, Breakage or Leakage:

Ventilate area. Avoid breathing vapor. Wear appropriate personal protective equipment, including appropriate respiratory protection. Contain spill if possible. Wipe up or absorb on suitable material and shovel up. Prevent entry into sewers and waterways. Avoid contact with skin, eyes or clothing.

SECTION 7 HANDLING AND STORAGE

Precautions to be Taken in:

Handling: Minimum feasible handling temperatures should be maintained.

Storage: Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Equipment (Type)

Eye/Face Protection:

Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact.

Skin Protection:

Protective clothing such as coveralls or lab coats should be worn. Launder or dry-clean when soiled. Gloves and boots resistant to chemicals and petroleum distillates required. Exposed workers should wash exposed skin several times daily with soap and water.

Remove and dry-clean or launder clothing soaked or soiled with this material before reuse. Dry cleaning of contaminated clothing may be more effective than normal laundering. Inform individuals responsible for cleaning of potential hazards associated with handling contaminated clothing.

Respiratory Protection:

Airborne concentrations should be kept to lowest levels possible. If vapor, dust or mist is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air-supplied respirator after determining the airborne concentration of the contaminant.

Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

Ventilation:

Local exhaust ventilation recommended if generating vapor, dust, or mist. If exhaust ventilation is not available or inadequate, use MSHA or NIOSH approved respirator as appropriate.

Exposure Limit for the Total Product: None established for product

| SECTION 9 | PHYSICAL AND CHEMICAL PROPERTIES |
|---------------------------------|---|
| Appearance: | Clear yellow liquid. |
| Odor: | Odorless |
| Boiling point (deg C): | > 240C(>464F) at atmospheric pressure |
| Melting/Freezing Point (deg C): | Not determined |
| Specific Gravity (water=1): | .86 - .88 |
| pH: | Not applicable |
| Vapor Pressure: | Not determined |
| Viscosity: | 4 - 8 cSt at 40 °C |
| Vapor Density (Air=1): | Not determined |
| Solubility in Water (%): | Negligible |
| Other: | None |

| SECTION 10 | STABILITY AND REACTIVITY |
|-----------------------------------|---|
| Stability: | Stable (thermal, light). |
| Incompatibility: | May react with strong oxidizing materials. |
| Hazardous Decomposition Products: | Normal combustion forms carbon dioxide and water vapor. Incomplete combustion can form carbon monoxide. |
| Hazardous Polymerization: | Will not occur. |

| SECTION 11 | TOXICOLOGICAL INFORMATION |
|---|----------------------------------|
| TOXICOLOGICAL INFORMATION (ANIMAL TOXICITY DATA) | |

| | |
|-------------|--|
| Oral: | LD50 believed to be > 5 g/kg (rat) practically non-toxic |
| Inhalation: | Not determined |
| Dermal: | LD50 believed to be > 10 g/kg (rabbit) practically non-toxic |

IRRITATION INDEX, ESTIMATION OF IRRITATION (SPECIES)

| | |
|----------------|--|
| Skin: | (Draize) believed to be between 3-5 (rabbit) moderately irritating (maximum 8) |
| Eyes: | (Draize) believed to be < 15 (rabbit) no appreciable effect (maximum 110) |
| Sensitization: | Not determined |

Other: This product, or a component of this product, has been shown to damage red blood cells or blood forming organs, and has caused anemia in laboratory animals.

SECTION 12 DISPOSAL CONSIDERATIONS

Waste Disposal Methods:

This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

Remarks: None.

SECTION 13 TRANSPORT INFORMATION

Transportation

DOT: Not regulated according to DOT.

IMDG: Not regulated according to IMDG.

ICAO/IATA: Not regulated according to ICAO/IATA.

TDG: Not regulated according to TDG.

SECTION 14 REGULATORY INFORMATION

FEDERAL REGULATIONS

This product and/or its components are considered non-hazardous by the following standards:

OSHA Hazard Comm. Standard Classification

SARA Title III Section 311 Hazardous Categorization

No chemicals subject to reporting per the following standards:

SARA Title III Section 302/304 Extremely Hazardous Substances.

SARA Title III Section 313 Toxic Chemical.

CERCLA 102(a)/DOT Hazardous Substances.

California Prop. 65

States Right-to-Know Regulations.

State list: CT (Connecticut), FL (Florida), IL (Illinois), MI (Michigan),
LA (Louisiana), MA (Massachusetts), NJ (New Jersey),
PA (Pennsylvania), RI (Rhode Island)

INTERNATIONAL REGULATIONS

TSCA Inventory Status: This product, or its components, are listed on, or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

Canadian Inventory Status: This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL).

EINECS Inventory Status: This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS) or the European List of Notified Chemical Substances (ELINCS).

Australian Inventory Status: Not determined.

Japan Inventory Status: Not determined.

SECTION 15**ENVIRONMENTAL INFORMATION**

Biodegradability: Estimated to be less than 40% degradation over a test period of more than 28 days.

Potential to Bioaccumulation: This product is estimated to have a very slow rate of bioaccumulation.

Remarks: None

SECTION 16**OTHER INFORMATION**

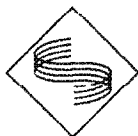
None

Date of Revision: May 7, 2004

Supersedes: January, 2003 and older versions

Shrieve Chemical Products
1755 Woodstead Court
The Woodlands, TX 77380

The information contained herein is based on the data available to us and is believed to be correct. However, Shrieve Chemical Products makes no warranty, expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Shrieve Chemical Products assumes no responsibility for injury from the use of the product described herein.



Shrieve Chemical Products

1755 Woodstead Court
The Woodlands, Texas 77380
(281) 367-4226

Technical Data Sheet

ZEROL® 30 REFRIGERATION FLUID

ZEROL® 30 is an extra low viscosity high quality synthetic alkylbenzene refrigeration oil for halogenated refrigerants in refrigerating and air-conditioning applications.

| <u>TEST</u> | <u>ASTM METHOD</u> | <u>SPECIFICATION (1)</u> | <u>TYPICAL VALUE</u> |
|-------------------------------------|--------------------|--------------------------|----------------------|
| Floc Point, °C | [ASHRAE - 86] | - 50 max | <-73 |
| Viscosity Centistokes @ 40° C | D-445 | 4 – 7 | 5.5 |
| Color, ASTM | D-1500 | 2 max | 10.5 |
| Gravity, 15° C | D-1298 | 0.86 min. | 0.8703 |
| Pour Point, °C | D-97 | - 35 max | - 40 |
| *Water content, ppm | D-1533 | 30 ppm | 20 |
| Flash Point, °C | D-92 | | 125 |
| Dielectric strength, KV | D-877 | 30 min | > 35 |
| Refrigerant Miscibility (R-22), °C | | | - 70 |

*30 ppm for bulk, 45 ppm in drums

(1) Subject to change without notice

4/2003

JMC/RMS-0312A

TOXICITY DATA FOR R-125/134a (58.0/42.0)

2003.12.15

prepared by

**James M. Calm, P.E.
Engineering Consultant
10887 Woodleaf Lane
Great Falls, VA 22066-3003 USA**

for

**Refrigerant Management Services of Georgia (RMS of Georgia)
610 McFarland / 400 Drive
Alpharetta, GA 30004 USA**

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TOXICITY DATA FOR R-125/134a (58.0/42.0)

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ABSTRACT

This report provides acute and chronic toxicity information for anticipated inclusion in an application for a standard designation and safety classification for the R-125/134a (58.0/42.0) refrigerant blend. It also identifies sources for this information. The report addresses specified exposure limits as well as prescribed data for inhalation, oral, and dermal lethality; cardiac sensitization; and other escape-impairing and/or permanently injuring effects. The presentation is formatted to facilitate insertion in an application pursuant to ANSI/ASHRAE Standard 34-2001, *Designation and Safety Classification of Refrigerants*.

INTRODUCTION

This report identifies toxicity data and their sources to assist RMS of Georgia in seeking a designation and safety classification in ASHRAE 34 for the R-125/134a (58.0/42.0) refrigerant blend. As used herein, ASHRAE 34 refers to ANSI/ASHRAE Standard 34-2001, *Designation and Safety Classification of Refrigerants*, as published by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE), and addenda thereto that were published as of 2003.12.15.^{1,2}

The report specifically addresses the toxicity data, selection rationale, documentation, and bibliographic citations for the sources as called for in §8.6 *Toxicity Information*, §8.6.1 *Acute Toxicity*, and §8.6.2 *Chronic Toxicity* for the subject blend and its components. It also indicates recommended values for the acute toxicity exposure limit (ATEL) and from it a recommended concentration limit (RCL) for emergency exposures. The recommended ATEL and RCL follow the approach and calculation methods of a systematic study prepared, in separate work, for consideration by the cognizant review committees for ASHRAE 34, namely SSPC 34 and its Toxicity Subcommittee, and others.³ The recommended RCL is predicated on flammability indications provided by RMS of Georgia⁴ and consistent assumptions based on the components.

The report does not provide either the material safety data sheets (MSDSs) or the analysis of the worst case of fractionation for toxicity as called for in the application requirements of ASHRAE 34, but it does outline a rationale for not performing the fractionation analysis. The report is based on specified data gathering and analyses. It does not present new test results, verify prior findings, or imply endorsement of the identified data. The compilation is intended to assist

qualified safety professionals; it is not meant for use by individuals lacking training and experience in control of chemical hazards and refrigeration safety.

The report does not constitute a toxicological assessment. The underlying effort constitutes data gathering rather than evaluation and was limited to compilation of specified data and references.

PAGE NUMBERING

The page numbers in the subsequent section are preceded by "3-" to facilitate direct insertion in application(s) for the subject designation and safety classification. This choice is based on the sequence prescribed in ASHRAE 34 §8.2, *Organization and Content*, for applications. This numbering anticipates insertion by others of remaining sections in the sequence:

| section | content |
|---------|-----------------------------|
| — | Cover |
| 1 | administrative information |
| 2 | designation information |
| 3 | toxicity information |
| 4 | flammability information |
| 5 | other safety information |
| 6 | appendices (if applicable) |

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Additional addenda are in preparation, under public review, or waiting for approval(s), but are not published at this point.

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SECTION 3: TOXICITY INFORMATION

The paragraph numbering in this section corresponds to the application instructions of ASHRAE 34 to facilitate review. Parenthetical notes are included for cited toxicity tests to indicate compliance with *Good Laboratory Practices* (GLP) if identified; such information is not provided for peer-reviewed publications such as journal articles, reports, and assessments.

8.6 TOXICITY INFORMATION

8.6.1 Acute Toxicity

Table 1: Acute Toxicity Data Summary

| Item | R-125 | R-134a |
|---|----------|----------|
| (a) ACGIH TLV-C (ppm v/v) | none | none |
| (b) ACGIH TLV-STEL (ppm v/v) | none | none |
| MAK peak (ppm TWA for 15 min) | none | 8,000 |
| (c) NIOSH IDLH (ppm v/v) | none | ≈50,000 |
| (d) 4-hr LC ₅₀ rat (ppm v/v) | >769,000 | >359,300 |
| (e) LD ₅₀ | | |
| dermal (mg/kg) | — | — |
| oral (mg/kg) | — | — |
| (f) cardiac sensitization (ppm v/v) | | |
| EC ₅₀ | 139,000 | 205,000 |
| LOEL | 100,000 | 75,200 |
| NOEL | 75,000 | 49,800 |

none indicates *none adopted*; ≈ indicates *consistent index*; — indicates *no data*; see text for discussion and sources

(a) ACGIH TLV-C:

ACGIH has not adopted a TLV-C for R-125 or R-134a.¹⁻⁴

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Other than general (not substance-specific) multipliers of occupational limits, ACGIH, AIHA, DFG (MAK), JSOH, NIOSH, and other sources investigated do not recommend a ceiling limit for R-125 or R-134a.^{5,6}

(b) ACGIH TLV-STEL:

ACGIH has not adopted a TLV-STEL for R-125 or R-134a.¹⁻⁵

Other than general (not substance-specific) multipliers of occupational limits, ACGIH, AIHA, JSOH, NIOSH, and other sources investigated do not recommend a short-term exposure limit for R-125 or R-134a.

The DFG Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area recommends peak limitation category of II for R-134a with a multiplier of the maximum Arbeitsplatz Konzentration [maximum workplace concentration] (MAK) resulting in a peak limit of 8,000 ppm v/v for a time-weighted-average (TWA) for 15 minutes not more than four times per 8-hr shift.⁶ The Commission makes no recommendations for R-125.⁶

(c) NIOSH IDLH if assigned:

NIOSH has not assigned an IDLH value for R-125 or R-134a.^{7,8}

For R-134a, ARI recommends a concentration of 50,000 ppm v/v determined on a consistent basis with the Standards Completion Program (SCP) IDLH.⁹ ARI has not updated this surrogate for the 1994 revision to the IDLH definition.

(d) LC₅₀:

R-125

Nakayama et al. (conformed to GLP) indicates no mortality in ten rats exposed whole body to an average concentration of 769,000 ppm v/v in oxygen (with a brief excursion to 398,000 ppm due to a frozen regulator) for 4 hr.¹⁰ Accordingly, the 4-hr ALC and LC₅₀ exceed 769,000 ppm v/v. The Programme for Alternative Fluorocarbon Toxicity Testing (PAFT) indicates that the 4-hr ALC (species not indicated, but identified as rats for other compounds) exceeds 800,000 ppm v/v, which was the target concentration for the Nakayama et al. study.¹¹ Most Material Safety Data Sheets (MSDSs) from manufacturer also cite the 800,000 ppm v/v value.

An earlier study by Panepinto (does not conform to GLP) found that the 4-hr ALC exceeds 709,000 ppm v/v based on no deaths in six tested rats.¹² Panepinto's finding supports the Nakayama et al. indication.

R-134a

Silber (predates GLP) indicates no mortality in six rats exposed to 359,300 ppm v/v for 4 hr, hence both the ALC and LC₅₀ exceed that concentration.¹³ The same study also cites a 4-hr ALC of 566,700 ppm v/v, but this concentration was fatal to more than half of the animals tested, namely five of six rats. The CICAD report¹⁴ and some MSDSs echo the higher concentration.

Other sources cite a 4-hr LC₅₀ rat of >500,000 ppm v/v,^{11,15-17} and some MSDSs do likewise. An ECETOC JACC report attributes it to unpublished ICI data.^{18,19} Efforts to locate it through the identified source found only a citation by Ferguson-Smith that attributes the LC₅₀ to an internal ICI communication that could not be retrieved.²⁰⁻²²

Rissolo (predates GLP) found a 30-min ALC rat of 750,000 ppm v/v based on two deaths among four exposed rats.²³ Applying the ten Berge extrapolation suggests a 4-hr LC₅₀ of approximately 265,000 ppm v/v.²⁰ Given later, actual testing at 359,300 ppm v/v, extrapolation of the earlier 30-min test result is deemed less reliable (both studies were performed by the same laboratory).

(e) LD₅₀:

No dermal (contact) or oral (ingestion) toxicity data were found for R-125 or R-134a. Only limited data were found for isopentane. Absence of such data is not surprising in light of the difficulties in testing dermal (contact) or oral (ingestion) toxicity as well as frostbite risks with volatile compounds having atmospheric boiling points below mammalian body and room temperatures.

(f) cardiac sensitization response level:

R-125

Hardy et al. (conformed to GLP) report no and one marked responses among six dogs tested at 75,000 and 100,000 ppm v/v, respectively.²⁴ The same study reported an EC₅₀ of 139,000 ppm v/v while a later compilation (survey) by the same authors indicates an EC₅₀ of 170,000 ppm v/v.^{24,25} While the EC₅₀ selection is unclear in this case, the NOEL is not.

R-134a

Mullin (predates GLP) reports no sensitization in ten dogs at 49,800 ppm v/v, marked response in two of ten dogs at 75,200 ppm v/v, and in two of four dogs with one death at 101,900 ppm v/v.²⁶

Hardy et al. (conformed to GLP) report later tests with no sensitization at 40,000 ppm v/v as well as marked responses in two of six dogs at 80,000 ppm v/v.²⁷

The NOELs and LOELs from Mullin and from Hardy et al. reflect different test concentrations, but the results are consistent. Accordingly, the higher NOEL of 49,800 ppm v/v, and more conservative LOEL of 75,200 ppm v/v, both from Mullin,²⁶ most closely bracket the anticipated threshold effect level.

Kenny and Hardy (conformed to GLP, but the EC₅₀ used data from some earlier studies that predated GLP or did not) indicate an EC₅₀ of 205,000 ppm v/v.²⁸ Hardy et al. (based on prior studies some of which conformed to GLP, some that did not, and some that predated GLP) also cite this value.²⁵

8.6.2 Chronic Toxicity

Table 2: Chronic Toxicity Data Summary

| Item | R-125 | R-134a | blend ^a |
|---|-------------|-------------|--------------------|
| (a) repeat exposure toxicity data (ppm v/v) | see text | see text | — |
| (b) ACGIH TLV-TWA (ppm v/v) | none | none | none |
| (c) AIHA WEEL (ppm v/v) | 1,000 | 1,000 | none |
| (d) OSHA PEL (ppm v/v) | none | none | none |
| consistent PEL (ppm v/v) | use WEEL | use WEEL | 1000 see text |

none indicates *none adopted index*; — indicates *no data*; see text for discussion and sources

^a R-125/134a (58.0/42.0)

(a) repeat exposure toxicity data:

R-125

A PAFT assessment of R-125 concludes that this compound showed low toxicity in repeated inhalation exposure studies. No adverse effects were observed in rats exposed by inhalation at concentrations of up to 50,000 ppm v/v for up to 90 days. Inhalation developmental toxicity studies with rats and rabbits indicate that R-125 is not teratogenic and does not cause fetal effects at inhalation concentrations up to 50,000 ppm v/v. In genetic toxicity testing, R-125 was not mutagenic in an Ames assay, Chinese Hamster Ovary assay, or chromosomal aberration study with human lymphocytes. These studies were *in vitro* assays. Also, R-125 was not active in an *in vivo* mouse micronucleus study. Metabolism studies with R-125 did not detect any metabolism.^{11,29}

PAFT concluded that R-125:¹¹

- has very low acute and subchronic inhalation toxicity.
- is not a developmental toxicant.
- is not genotoxic.

Kawano et al. (summary) indicates that subchronic exposures of rats for 6 hr/d, 5 d/wk for 4 and 13 weeks showed no evidence of toxicity at 50,000 ppm v/v, the highest concentration tested. They also indicate that developmental tests found slight, reversible toxicity in the rabbit and rat dams, but no convincing evidence of embryotoxicity or teratogenicity. *In vitro* tests in *Salmonella typhimurium* and *Escherichia coli* bacteria (Ames Assay) found no clear evidence of clastogenic activity in Chinese hamster ovary (CHO) cells or human lymphocytes. *In vivo* tests found R-125 not mutagenic in the mouse micronucleus test, even at concentrations as high as 600,000 ppm v/v for 6 hr. Kawano et al. conclude that R-125 is "very low in biological reactivity," not a cumulative toxin, not a developmental toxin, and is not a mutagen.²⁹

An assessment by ECETOC corroborates these findings.³⁰

R-134a:

A PAFT evaluation of R-134a concludes that no significant toxicological effects in body weights, in-life measurements, clinical observations, clinical chemistry, hematology, or pathology were observed in rats following inhalation exposures for up to two years at concentrations up to 50,000 ppm v/v except for the testes of male rats at the end of the treatment period. It reports increased incidence of hyperplasia (cell growth) and benign tumors of Leydig cells in microscopic examination of the testis of rats exposed at 50,000 ppm, but no treatment-related malignant tumors. Based on an independent review, PAFT concluded that none of the benign tumors were life-threatening, all occurred near the end of the study, and the no-observed-effect level (NOEL) was 10,000 ppm v/v.^{31,32}

Genetic toxicity studies with R-134a included a bacterial reverse mutation (Ames) test, an *in vitro* chromosomal aberration study with human lymphocytes, and a cytogenetics assay with Chinese Hamster Lung Cell (CHL). *In vivo* studies included cytogenetics, mouse micronucleus, and a dominant lethal study in the mouse. Their findings indicate that R-134a is not genotoxic.^{31,32}

Results from inhalation developmental toxicity studies indicate that R-134a does not cause teratogenic effects in rats or rabbits. At inhalation concentrations of 300,000 ppm v/v, slight maternal toxicity and embryotoxicity, evidenced by a decrease in fetal body weights, were observed in rats. Lower fetal body weights of rats and rabbits have been observed at 50,000 ppm v/v with slight maternal toxicity; lower maternal body weights were also observed in rats at this concentration. Also, no fetal effects were observed in rabbits at inhalation concentrations of up to 40,000 ppm v/v.^{31,32}

PAFT concluded that R-134a.³¹

- has very low acute and subchronic inhalation toxicity,
- caused an increased incidence of benign tumors in rats following long-term exposures to high concentrations,
- is not a developmental toxicant, and
- is not genotoxic.

An assessment by ECETOC corroborates these findings.³³

R-125/134a (58.0/42.0):

No repeat exposure toxicity data were found for R-125/134a (58.0/42.0).

(b) ACGIH TLV-TWA (or TLV-C):

ACGIH has not adopted a TLV-TWA or TLV-C for R-125 or R-134a.¹⁻⁵

(c) AIHA WEEL:

AIHA has adopted WEEL guide concentrations 1000 ppm v/v for both R-125 and R-134a.³⁴⁻³⁶

(d) OSHA PEL

OSHA has not promulgated a PEL for R-125, R-134a, or R-125/134a (58.0/42.0).^{8,37,38}

Based on the WEELs for R-125 and R-134a and the method outlined for the TLVs of mixtures,¹ the calculated concentration consistent with a PEL for R-125/134a (58.0/42.0) is 1000 ppm v/v as shown in Table 3:

Table 3: Calculation of R-125/134a (58.0/42.0) Blend TLV^a

| | R-125 | R-134a | blend ^b |
|--|-----------|-----------|--------------------|
| mass fraction (% m/m) | 58.0 | 42.0 | 100.0 |
| molar mass (g/mol) | 120.021 | 102.039 | 111.74591 |
| TLV-TWA or \approx (ppm v/v) | 1,000 | 1,000 | — |
| TLV-TWA or \approx (mg/m ³) | 4900 | 4200 | — |
| fraction / TLV | 0.0001184 | 0.0001000 | 0.0002184 |
| blend \approx TLV-TWA (mg/m ³) | — | — | 4579 |
| contrib to TLV (mg/m ³) | 0.204 | 0.240 | — |
| contrib to TLV (ppm v/v) | 541.1 | 460.9 | 1001.9 |
| blend \approx TLV-TWA (ppm v/v) ^c | — | — | 1000 |

^a \approx indicates consistent index; — indicates no data

^a based on method for additive (dependent) effects outlined in Appendix C of reference 1

^b R-125/134a (58.0/42.0)

^c rounded to two significant digits of precision

Please also refer to the MSDS (see below, not provided by JMC) for R-125/134a (58.0/42.0) for the exposure limit recommended by the manufacturer.

8.6.3 Material Safety Data Sheets (MSDSs)

Inserted after references (MSDSs not provided by JMC).

ADDITIONAL INFORMATION

§6.1.5 Safety Classification of Refrigerant Blend

Analysis of the worst case of fractionation for toxicity is not warranted for R-125/134a (58.0/42.0) since the TLV-TWA and WEEL concentrations for them are both 1000 ppm v/v range as summarized in Table 2 and Table 3. Accordingly, a fractionation analysis for the blend also would result in a calculated value consistent with a TLV-TWA of 1000 ppm v/v for any case of fractionation. Based on ASHRAE 34 §6.1.5, the worst case of fractionation for toxicity of R-125/134a (58.0/42.0) therefore justifies classification as class A for toxicity.³⁹⁻⁴⁵

Recommended ATEL and RCL for Potential Addendum to ASHRAE 34

The following data and resulting recommendations for ATEL and RCL concentrations for R-125/134a (58.0/42.0) follow the criteria and methods identified by Calm.²⁰ The data selection criteria and calculation method are consistent with those identified in the fourth public review draft of addendum "34u" to ASHRAE 34.⁴⁶


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- 39 **Designation and Safety Classification of Refrigerants**, ANSI/ASHRAE Standard 34-2001, American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE), Atlanta, GA, 2001 *Designation and Safety Classification of Refrigerants*, ANSI/ASHRAE Standard 34-2001, American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE), Atlanta, GA, USA, 2001
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- 42 **Designation and Safety Classification of Refrigerants**, ANSI/ASHRAE Addendum c to ANSI/ASHRAE Standard 34-2001, ASHRAE, Atlanta, GA, USA, 2003

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- 45 **Designation and Safety Classification of Refrigerants**, ANSI/ASHRAE Addenda f, g, and h to ANSI/ASHRAE 34-2001, ASHRAE, Atlanta, GA, USA, 2003
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- 47 G. D. Ritchie, E. C. Kimmel, L. E. Bowen, J. E. Reboulet, and J. Rossi, **Acute Neurobehavioral Effects in Rats from Exposure to HFC 134a or CFC 12**, *NeuroToxicology*, 22:233-248, 2001
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|  <p style="text-align: center;">United States ENVIRONMENTAL PROTECTION AGENCY Washington, DC 20460</p> | <p>AGENCY USE ONLY OMB Control No.: 2060-0226 Expires: 12/31/2007</p> | | |
| <p style="text-align: center;">TSCA/SNAP ADDENDUM for Significant New Alternatives <i>R-421B</i></p> | <p>Date of Receipt:</p> | | |
| <p>When completed send this form via U.S. mail to: Or via overnight delivery to:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> SNAP Document Control Officer Office of Air and Radiation, 6205 J U.S. EPA 1200 Pennsylvania Ave, NW Washington, DC 20460 </td> <td style="width: 50%; vertical-align: top;"> SNAP Document Control Officer U.S. EPA 8th Floor 1310 L St, NW Washington, DC 20005 </td> </tr> </table> | SNAP Document Control Officer Office of Air and Radiation, 6205 J U.S. EPA 1200 Pennsylvania Ave, NW Washington, DC 20460 | SNAP Document Control Officer U.S. EPA 8 th Floor 1310 L St, NW Washington, DC 20005 | <p><i>SEP 22 2005</i> Date 90 Day Review Begins:</p> <p>Date Review Completed:</p> <p>PMN Document Control Number</p> |
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| <p>Enter the total number of pages in your SNAP information Notice: <i>37</i></p> | <p>SNAP Document Control No. <i>0AR-2003-118-115</i></p> | | |
| INTRODUCTION | | | |

EPA-APPROVED REGULATIONS IN THE WEST VIRGINIA SIP—Continued

| State citation [Chapter 16–20 or 45 CSR] | Title/subject | State effective date | EPA approval date | Additional expla- nation/citation at 40 CFR 52.2565 |
|---|---|----------------------------|-------------------------|---|
| [45 CSR] Series 1—Control and Reduction of Nitrogen Oxides From Non-Electric Generating Units As a Means to Mitigate Transport of Ozone Precursors | | | | |
| Section 45–1–90 | Requirements for Stationary Internal Combustion Engines | 5/1/06 | | New Section. |
| Section 45–1–100 | Requirements for Emissions of NO _x from Cement Manufac- turing Kilns. | 5/1/06 | | |
| * | * | * | * | * |

§ 52.2522 [Removed and Reserved]

■ 3. In § 52.2522, paragraph (i) is removed and reserved.

[FR Doc. E6–15981 Filed 9–27–06; 8:45 am]

BILLING CODE 6560–50–P

**ENVIRONMENTAL PROTECTION
AGENCY**

40 CFR Part 82

[EPA–HQ–OAR–2003–0118; FRL–8223–9]

RIN 2060–AG12

**Protection of Stratospheric Ozone:
Notice 21 for Significant New
Alternatives Policy Program**

AGENCY: Environmental Protection
Agency (EPA).

ACTION: Notice of Acceptability.

SUMMARY: This Notice of Acceptability expands the list of acceptable substitutes for ozone-depleting substances (ODS) under the U.S. Environmental Protection Agency's (EPA) Significant New Alternatives Policy (SNAP) program. The substitutes are for use in the following sectors: refrigeration and air conditioning, foam blowing, cleaning solvents, aerosols, and sterilants. The determinations concern new substitutes.

DATES: This notice of acceptability is effective on September 28, 2006.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2003–0118 (continuation of Air Docket A–91–42). All electronic documents in the docket are listed in the index at <http://www.regulations.gov>. Although listed in the index, some information is not publicly available, i.e., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Publicly available docket materials are available either electronically at www.regulations.gov or in hard copy at the EPA Air Docket (No.

A–91–42), EPA/DC, EPA West, Room B102, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT:

Margaret Sheppard by telephone at (202) 343–9163, by facsimile at (202) 343–2338, by e-mail at sheppard.margaret@epa.gov, or by mail at U.S. Environmental Protection Agency, Mail Code 6205J, 1200 Pennsylvania Avenue, NW., Washington, DC 20460. Overnight or courier deliveries should be sent to the office location at 1310 L Street, NW., 8th floor, Washington, DC, 20005.

For more information on the Agency's process for administering the SNAP program or criteria for evaluation of substitutes, refer to the original SNAP rulemaking published in the **Federal Register** on March 18, 1994 (59 FR 13044). Notices and rulemakings under the SNAP program, as well as other EPA publications on protection of stratospheric ozone, are available at EPA's Ozone Depletion World Wide Web site at <http://www.epa.gov/ozone/> including the SNAP portion at <http://www.epa.gov/ozone/snap/>.

SUPPLEMENTARY INFORMATION:

- I. Listing of New Acceptable Substitutes
 - A. Refrigeration and Air Conditioning
 - B. Foam Blowing
 - C. Cleaning Solvents
 - D. Aerosols
 - E. Sterilants
 - II. Section 612 Program
 - A. Statutory Requirements
 - B. Regulatory History
- Appendix A—Summary of Acceptable Decisions

I. Listing of New Acceptable Substitutes

This section presents EPA's most recent acceptable listing decisions for substitutes in the following industrial sectors: Refrigeration and air conditioning, foam blowing, cleaning

solvents, aerosols and sterilants. For copies of the full list of ODS substitutes in all industrial sectors, visit EPA's Ozone Depletion Web site at <http://www.epa.gov/ozone/snap/lists/index.html>.

The Agency has determined that the Clean Air Act does not authorize EPA to regulate for global climate change purposes (Memo to Acting Administrator, Marianne L. Horinko from Robert E. Fabricant, 2003. Subject: EPA's Authority to Impose Mandatory Controls to Address Global Climate Change under the Clean Air Act). The Agency has not yet concluded how this determination would affect its consideration of the global warming potential of substitutes under the SNAP program. Regardless, for the substitutes considered here, the global warming potential of the alternatives was not a determinative factor in EPA's acceptable subject to use conditions determination.

The sections below discuss each substitute listing in detail. Appendix A contains a table summarizing today's listing decisions for new substitutes. The statements in the "Further Information" column in the table provide additional information, but are not legally binding under section 612 of the Clean Air Act. In addition, the "further information" may not be a comprehensive list of other legal obligations you may need to meet when using the substitute. Although you are not required to follow recommendations in the "further information" column of the table to use a substitute, EPA strongly encourages you to apply the information when using these substitutes. In many instances, the information simply refers to standard operating practices in existing industry and/or building-code standards. Thus, many of these statements, if adopted, would not require significant changes to existing operating practices.

You can find submissions to EPA for the use of the substitutes listed in this document and other materials supporting the decisions in this action

in docket EPA-HQ-OAR-2003-0118 at <http://www.regulations.gov>.

A. Refrigeration and Air Conditioning

1. R-421A

EPA's decision:

R-421A [R-125/134a (58.0/42.0)] is acceptable for use in new and retrofit equipment as a substitute for hydrochlorofluorocarbon (HCFC)-22 in:

- Chillers (centrifugal, screw, reciprocating);
- Industrial process refrigeration;
- Industrial process air conditioning;
- Retail food refrigeration;
- Cold storage warehouses;
- Refrigerated transport;
- Commercial ice machines;
- Ice skating rinks;
- Household refrigerators and freezers;
- Vending machines;
- Water coolers;
- Residential dehumidifiers; and
- Household and light commercial air conditioning and heat pumps.

R-421A is a blend of 58% by weight hydrofluorocarbon (HFC)-125 (pentafluoroethane, CAS ID #354-33-6), and 42% by weight HFC-134a (1,1,1,2-tetrafluoroethane, CAS ID #811-97-2). A common trade name for this refrigerant is Choice R421A. You may find the submission under Docket item EPA-HQ-OAR-2003-0118-0142 at www.regulations.gov.

Environmental information: The ozone depletion potential (ODP) of R-421A is zero. The contribution of this blend to greenhouse gas emissions will be minimized through the implementation of the venting prohibition under section 608(c)(2) of the Clean Air Act (see 40 CFR, part 82, subpart F). This section and EPA's implementing regulations prohibit venting or release of substitutes for class I or class II ODSs used in refrigeration and air conditioning and require proper handling, such as recycling or recovery, and disposal of these substances.

HFC-125 and HFC-134a are excluded from the definition of volatile organic compound (VOC) under Clean Air Act regulations (see 40 CFR 51.100(s)) addressing the development of State implementation plans (SIPs) to attain and maintain the national ambient air quality standards.

Flammability information: Neither component of this blend is flammable.

Toxicity and exposure data: HFC-125 and HFC-134a have 8 hour/day, 40 hour/week workplace environmental exposure limits (WEELs) of 1000 ppm established by the American Industrial Hygiene Association (AIHA). EPA recommends that users follow all

requirements and recommendations specified in the Material Safety Data Sheet (MSDS) for the blend and the individual components and other safety precautions common in the refrigeration and air conditioning industry. EPA also recommends that users of R-421A adhere to the AIHA's WEELs.

Comparison to other refrigerants: R-421A is not an ozone depleter in contrast to HCFC-22 which it replaces. We find that R-421A is acceptable because it does not pose a greater overall risk to public health and the environment in the end uses listed above.

2. R-421B

EPA's decision:

R-421B [R-125/134a (85.0/15.0)] is acceptable for use in new and retrofit equipment as a substitute for HCFC-22, R-502, and chlorofluorocarbon (CFC)-12 in:

- Industrial process refrigeration;
- Retail food refrigeration;
- Cold storage warehouses;
- Refrigerated transport;
- Commercial ice machines;
- Ice skating rinks;
- Household refrigerators and freezers.

R-421B is a blend of 85.0% by weight HFC-125 (pentafluoroethane, CAS ID #354-33-6) and 15.0% by weight HFC-134a (1,1,1,2-tetrafluoroethane, CAS ID #811-97-2). A common trade name for this refrigerant is Choice R421B. You may find the submission under Docket item EPA-HQ-OAR-2003-0118-0143 at www.regulations.gov.

Environmental information: The ODP of R-421B is zero. For environmental information on the components of this blend see the section on environmental information above for R-421A.

Flammability information: Neither component of this blend is flammable.

Toxicity and exposure data: See the section above on toxicity and exposure data above for R-421A.

Comparison to other refrigerants: R-421B is not an ozone depleter; thus, it poses a lower risk for ozone depletion than the ODSs it replaces. Flammability and toxicity risks are low, as discussed above. We find that R-421B is acceptable because it does not pose a greater overall risk to public health and the environment in the end uses listed above.

3. R-422D

EPA's decision:

R-422D [R-125/134a/600a (65.1/31.5/3.4)] is acceptable for use in new and retrofit equipment as a substitute for HCFC-22 in:

- Chillers (centrifugal, screw, reciprocating);

- Industrial process refrigeration;
- Industrial process air conditioning;
- Retail food refrigeration;
- Cold storage warehouses;
- Refrigerated transport;
- Commercial ice machines;
- Ice skating rinks;
- Household refrigerators and freezers;
- Vending machines;
- Water coolers;
- Residential dehumidifiers;
- Non-mechanical heat transfer;
- Household and light commercial air conditioning and heat pumps; and
- Motor vehicle air conditioning (buses and passenger trains only).

R-422D is a blend of 65.1% by weight HFC-125 (pentafluoroethane, CAS ID #354-33-6), 31.5% by weight HFC-134a (1,1,1,2-tetrafluoroethane, CAS ID #811-97-2), and 3.4% by weight R-600a (isobutane, 2-methyl propane, CAS ID #75-28-5). A common trade name for this refrigerant is ISCEON MO29. You may find the submission under Docket item EPA-HQ-OAR-2003-0118-0121 at www.regulations.gov.

Environmental information: The ODP of R-422D is zero. For environmental information on HFC-125 and HFC-134a, see the section on environmental information above for R-421A.

The contribution of this blend to greenhouse gas emissions will be minimized through the implementation of the venting prohibition under section 608(c)(2) of the Clean Air Act (see 40 CFR, part 82, subpart F). This section and EPA's implementing regulations prohibit venting or release of substitutes for class I or class II ODSs used in refrigeration and air conditioning and require proper handling, such as recycling or recovery, and disposal of these substances.

Isobutane is a VOC under Clean Air Act regulations concerning the development of SIPs to attain and maintain the national ambient air quality standards. 40 CFR 51.100(s).

Flammability information: While one component of the blend, isobutane, is flammable, the blend as formulated and under worst-case fractionated formulation scenarios, is not flammable.

Toxicity and exposure data: For information on the workplace exposure limits for HFC-125 and HFC-134a, see the section on toxicity and exposure data above for R-421A. Isobutane has an 8 hour/day, 40 hour/week threshold limit value (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) of 1000 ppm. EPA recommends that users follow all requirements and recommendations specified in the MSDS for the blend and the individual

components and other safety precautions common in the refrigeration and air conditioning industry. EPA also recommends that users of R-422D adhere to the AIHA's WEELs and the ACGIH's TLV.

Comparison to other refrigerants: R-422D is not an ozone depleter in contrast to HCFC-22 which it replaces. Flammability and toxicity risks are low, as discussed above. Thus, we find that R-422D is acceptable because it does not pose a greater overall risk to public health and the environment in the end uses listed above.

4. Formulation of RS-24 Changed

Refrigerant Solutions Ltd. (formerly Refrigerant Products Ltd.) has notified EPA that it is changing the composition of RS-24. On December 20, 2002 (67 FR 77927), EPA found the original formulation of RS-24 acceptable for a variety of end-uses. The composition of the old formulation was claimed as confidential business information (CBI). We will identify the old composition as "RS-24 (2002 composition)" and will continue to find it acceptable. EPA's decision on the new formulation is discussed below in the decision for R-426A.

5. R-426A

EPA's decision:

R-426A [R-125/134a/600/601a (5.1/93.0/1.3/0.6)] is acceptable for use in new and retrofit equipment as a substitute for CFC-12 in:

- Industrial process refrigeration;
- Industrial process air conditioning;
- Retail food refrigeration;
- Cold storage warehouses;
- Refrigerated transport;
- Commercial ice machines;
- Ice skating rinks;
- Vending machines;
- Water coolers;
- Household refrigerators and freezers; and
- Residential dehumidifiers.

R-426A [R-125/134a/600/601a (5.1/93.0/1.3/0.6)] is acceptable, subject to use conditions, for use in new and retrofit equipment as a substitute for CFC-12 in the following end use:

- Motor vehicle air conditioning.

Conditions for use in motor vehicle air conditioning systems. Regulations regarding recycling and prohibiting venting issued under section 609 of the Clean Air Act apply to this blend (subpart B of 40 CFR part 82).

On October 16, 1996, (61 FR 54029), EPA promulgated a final rule that

established certain conditions on the use of any refrigerant used as a substitute for CFC-12 in motor vehicle air conditioning systems (Appendix D of subpart G of 40 CFR part 82). That rule provided that EPA would list new motor vehicle air conditioning system refrigerants in future notices of acceptability and that these conditions would apply to any such refrigerant found acceptable. Therefore, the use of R-426A as a CFC-12 substitute in motor vehicle air conditioning systems must follow the standard conditions:

- The use of unique fittings designed by the refrigerant manufacturer;
- The application of a detailed label;
- The removal of the original refrigerant prior to charging with R-426A; and
- The installation of a high-pressure compressor cutoff switch on systems equipped with pressure relief devices.

The October 16, 1996 rule gives full details on these use conditions.

You must use the following fittings to use R-426A in motor vehicle air conditioning systems:

| Fitting type | Diameter (inches) | Thread pitch (threads/inch) | Thread direction |
|----------------------------------|-------------------|-----------------------------|------------------|
| Low-side service port | | Quick-connect | |
| High-side service port | | Quick-connect | |
| Large containers (>20 lb.) | | Quick-connect | |
| Small cans | | Quick-connect | |

The quick-connect fittings have been reviewed and found to be sufficiently different from HFC-134a and FRIGC FR-12 quick-connect fittings to be considered unique. The labels will have a gold background and black text. These are the same quick-connect fittings and same label as previously approved for RS-24 (2002 composition); however, the manufacturer of R-426A has stated that RS-24 (2002 composition) has not been and will not be sold for use in motor vehicle air conditioners.

R-426A is a blend of 5.1% by weight HFC-125 (pentafluoroethane, CAS ID #354-33-6), 93.0% by weight HFC-134a (1,1,1,2-tetrafluoroethane, CAS ID #811-97-2), 1.3% by weight R-600 (n-butane, CAS ID #106-97-8), and 0.6% by weight R-601a (isopentane, 2-methylbutane, CAS ID #78-78-4). A common trade name for this refrigerant is RS-24. This is a new formulation for RS-24, different from the one that EPA previously found acceptable in several refrigerant end uses (December 20, 2002; 67 FR 77927). You may find additional

information under Docket item EPA-HQ-OAR-2003-0118-0148 at www.regulations.gov.

Environmental information: The ODP of R-426A is zero. For environmental information on HFC-125 and HFC-134a see the section on environmental information above for R-421A.

The contribution of this blend to greenhouse gas emissions will be minimized through the implementation of the venting prohibition under section 608(c)(2) of the Clean Air Act (see 40 CFR, part 82, subpart F). This section and EPA's implementing regulations prohibit venting or release of substitutes for class I or class II ODSs used in refrigeration and air conditioning and require proper handling, such as recycling or recovery, and disposal of these substances.

Isopentane and n-butane are VOCs under Clean Air Act regulations concerning the development of SIPs to attain and maintain the national ambient air quality standards. 40 CFR 51.100(s).

Flammability information: While two of the blend components, n-butane and isopentane, are flammable, the blend as formulated, and under worst-case fractionated formulation scenarios, is not flammable.

Toxicity and exposure data: HFC-125 and HFC-134a have 8 hour/day, 40 hour/week WEELs of 1000 ppm established by the AIHA. The other components, n-butane and isopentane, have 8 hour/day, 40 hour/week threshold limit values (TLVs) established by the American Conference of Governmental Industrial Hygienists (ACGIH) of 800 ppm and 600 ppm, respectively. EPA recommends that users follow all requirements and recommendations specified in the MSDS for the blend and the individual components and other safety precautions common in the refrigeration and air conditioning industry. EPA also recommends that users of R-426A adhere to the AIHA's WEELs and the ACGIH's TLV.

Comparison to other refrigerants: R-426A is not an ozone depleter in contrast to CFC-12 which it replaces. Flammability and toxicity risks are low, as discussed above. Thus, we find that R-426A is acceptable because it does not pose a greater overall risk to public health and the environment in the end uses and applications listed above.

6. Formulation of RS-44 Changed

Refrigerant Solutions Ltd. (formerly Refrigerant Products Ltd.) has notified EPA that it is changing the composition of RS-44. On August 21, 2003 (68 FR 50533), EPA found the original formulation of RS-44 acceptable for a variety of end-uses. The composition of the old formulation was claimed as confidential business information (CBI). We will continue to identify the blend as "RS-44 (2003 composition)" and will continue to find it acceptable. EPA's decision on the new formulation is discussed below in the decision for R-424A.

7. R-424A

EPA's decision:

R-424A [R-125/134a/600a/600/601a] (50.5/47.0/0.9/1.0/0.6)] is acceptable for use in new and retrofit equipment as a substitute for HCFC-22 in:

- Chillers (centrifugal, screw, reciprocating);
- Industrial process refrigeration;
- Industrial process air conditioning;
- Retail food refrigeration;
- Cold storage warehouses;
- Refrigerated transport;
- Commercial ice machines;
- Ice skating rinks;
- Household refrigerators and freezers;
- Residential dehumidifiers; and
- Household and light commercial air conditioning and heat pumps.

R-424A is a blend of 50.5% by weight HFC-125 (pentafluoroethane, CAS ID # 354-33-6), 47.0% by weight HFC-134a (1,1,1,2-tetrafluoroethane, CAS ID #811-97-2), 0.9% by weight R-600a (isobutane, 2-methyl propane, CAS ID #75-28-5), 1.0% by weight R-600 (n-butane, CAS ID #106-97-8), and 0.6% by weight R-601a (isopentane, 2-methylbutane, CAS ID #78-78-4). A common trade name for this refrigerant is RS-44. This is a new formulation for RS-44, different from the one that EPA previously found acceptable in several refrigerant end uses (August 21, 2003; 68 FR 50533). You may find additional information under Docket item EPA-HQ-OAR-2003-0118-0131 at www.regulations.gov.

Environmental information: The ODP of R-424A is zero. For environmental information on HFC-125 and HFC-

134a, see the section on environmental information above for R-421A. For environmental information on R-600 and R-601a, see the section on environmental information above for R-426A. For environmental information on R-600a, see the section on environmental information above for R-422D.

The contribution of this blend to greenhouse gas emissions will be minimized through the implementation of the venting prohibition under section 608(c)(2) of the Clean Air Act (see 40 CFR, part 82, subpart F). This section and EPA's implementing regulations prohibit venting or release of substitutes for class I or class II ODSs used in refrigeration and air conditioning and require proper handling, such as recycling or recovery, and disposal of these substances.

Isobutane, n-butane, and isopentane are VOCs under Clean Air Act regulations concerning the development of SIPs to attain and maintain the national ambient air quality standards. 40 CFR 51.100(s).

Flammability information: While three components of the blend are flammable, the blend as formulated, and under worst-case fractionated formulation scenarios, is not flammable.

Toxicity and exposure data: For information on the workplace exposure limits for the components of this blend see the toxicity and exposure data sections above for R-421A, R-422D, and R-426A. EPA recommends that users follow all requirements and recommendations specified in the MSDS for the blend and the individual components and other safety precautions common in the refrigeration and air conditioning industry. EPA also recommends that users of R-424A adhere to the AIHA's WEELs and the ACGIH's TLV.

Comparison to other refrigerants: R-424A is not an ozone depleter in contrast to HCFC-22 which it replaces. Flammability and toxicity risks are low, as discussed above. Thus, we find that R-424A is acceptable because it does not pose a greater overall risk to public health and the environment in the end uses listed above.

8. R-407D

EPA's decision:

R-407D [R-32/125/134a (15.0/15.0/70.0)] is acceptable for use in new and retrofit equipment as a substitute for CFC-12 in:

- Refrigerated transport.

R-407D is a blend of 15.0% by weight HFC-32 (difluoromethane, CAS ID #75-10-5), 15.0% by weight HFC-125 (pentafluoroethane, CAS ID # 354-33-

6), and 70.0% by weight HFC-134a (1,1,1,2-tetrafluoroethane, CAS ID #811-97-2).

Environmental information: The ODP of R-407D is zero. For environmental information on HFC-125 and HFC-134a, see the section on environmental information above for R-421A.

The contribution of this blend to greenhouse gas emissions will be minimized through the implementation of the venting prohibition under section 608(c)(2) of the Clean Air Act (see 40 CFR, part 82, subpart F). This section and EPA's implementing regulations prohibit venting or release of substitutes for class I or class II ODSs used in refrigeration and air conditioning and require proper handling, such as recycling or recovery, and disposal of these substances. HFC-32 is excluded from the definition of volatile organic compound (VOC) under Clean Air Act regulations (see 40 CFR 51.100(s)) addressing the development of State implementation plans (SIPs) to attain and maintain the national ambient air quality standards.

Flammability information: While one component of the blend, HFC-32, is flammable, the blend as formulated and under worst case fractionated formulation scenarios is not flammable.

Toxicity and exposure data: For information on the workplace exposure limits for HFC-125 and HFC-134a, see the section on toxicity and exposure data above for R-421A. HFC-32 has an 8 hour/day, 40 hour/week workplace environmental exposure limits (WEELs) of 1000 ppm established by the American Industrial Hygiene Association (AIHA). EPA recommends that users follow all requirements and recommendations specified in the Material Safety Data Sheet (MSDS) for the blend and the individual components and other safety precautions common in the refrigeration and air conditioning industry. EPA also recommends that users of R-407D adhere to the AIHA's WEELs.

Comparison to other refrigerants: R-407D is not an ozone depleter in contrast to CFC-12 which it replaces. Flammability and toxicity risks are low, as discussed above. Thus, we find that R-407D is acceptable because it does not pose a greater overall risk to public health and the environment in the end uses listed above.

B. Foam Blowing

1. Ecomate™

EPA's decision:

Ecomate™ is acceptable as a substitute for CFCs and HCFCs in the following end uses:

- Polystyrene, Extruded Boardstock & Billet;
- Phenolic Insulation Board & Bunstock;
- Flexible Polyurethane;
- Polyurethane, Extruded Sheet; and
- Polyolefin.

EPA previously found Ecomate acceptable for a number of foam blowing end uses in Notice 18, August 21, 2003 (68 FR 50533) and Notice 19, October 1, 2004 (69 FR 58903).

The submitter, Foam Supplies Inc., claims that the composition of Ecomate™ is confidential business information (see docket A-91-42, item VI-D-296).

Environmental information:

Ecomate™ has no ODP. Users should be aware that Ecomate™ is not excluded from the definition of volatile organic compound (VOC) under Clean Air Act regulations addressing the development of State implementation plans (SIPs) to attain and maintain the national ambient air quality standards. 40 CFR 51.100(s). For more information, refer to the manufacturer of Ecomate™, EPA regulations, and your state or local air quality agency. Also, because Ecomate™ is considered hazardous, spills and disposal should be handled in accordance with requirements of the Resource Conservation and Recovery Act (RCRA).

Flammability information: Ecomate™ is flammable and should be handled with proper precautions. Use of Ecomate™ will require safe handling and shipping as prescribed by the Occupational Safety and Health Administration (OSHA) and the Department of Transportation (for example, using personal safety equipment and following requirements for shipping hazardous materials at 49 CFR parts 170 through 173). However, when blended with fire retardant, the flammability of Ecomate™ can be reduced to make a formulation that is either combustible or non-flammable (refer to the manufacturer of Ecomate™ for more information).

Toxicity and exposure data: Ecomate™ should be handled with proper precautions. EPA anticipates that Ecomate™ will be used consistent with the recommendations specified in the manufacturers' Material Safety Data Sheets (MSDSs) (e.g., use goggles and neoprene gloves when handling; handle in a fume hood or with adequate ventilation; if the workplace exposure limit is exceeded, use a NIOSH/MSHA approved air supplied respirator in the absence of proper environmental control). OSHA established a permissible exposure limit for the main component of Ecomate™ of 100 ppm

for a time-weighted average over an eight-hour work shift. The ACGIH recommends a TLV of 100 ppm on an eight-hour time-weighted average and a short-term exposure limit of 150 ppm for a 15-minute time-weighted average for the main component of Ecomate™.

Comparison to other foam blowing agents: Ecomate™ is not an ozone depleter in contrast to the CFCs and HCFCs it replaces. Although Ecomate™ is flammable, we find that the manufacturer's recommended precautions for safety are sufficient so that the risks will not be significantly higher than for other available or potentially available substitutes in this end use. Meeting Federal exposure requirements allows Ecomate™ to be used with no greater risk of toxicity than for other available or potentially available substitutes in this end use. Thus, we find that Ecomate™ is acceptable because there are no other substitutes that are currently or potentially available that provide a substantially lower risk to public health and the environment in the end uses listed above. You may find additional information under Docket item EPA-HQ-OAR-2003-0118-0063 at www.regulations.gov.

C. Cleaning Solvents

1. Mini-Max Cleaner®

EPA's decision:

The Mini-Max Cleaner® is acceptable as a substitute for CFC-113, methyl chloroform, and HCFCs in the following end-uses:

- Metal cleaning;
- Electronics cleaning; and
- Precision cleaning.

Mini-Max Cleaner® is a cleaning device that creates super-heated, high pressure steam vapor. A relatively small amount of water is used, thus minimizing the amount of waste water that is produced. You may find the submission under Docket item EPA-HQ-OAR-2003-0118-0120 and -0124 at www.regulations.gov.

Environmental information: Mini-Max Cleaner® does not create emissions and its ODP is zero. The relatively small amount of water used minimizes indirect impacts on the atmosphere and on water.

Flammability information: The device is not flammable. There is a potential explosion hazard when the Mini-Max® Cleaner is used in the presence of VOCs or where liquids with a flash point are added to the water. EPA recommends that users follow all requirements and recommendations specified in the user safety manual to minimize any risks.

Toxicity and exposure data: The Mini-Max Cleaner® introduces no

chemicals of concern. The resulting waste should be handled with safety precautions common in the solvent cleaning industry because the removed soils and chemicals may be toxic.

Comparison to other cleaning solvents: The Mini-Max Cleaner® is not an ozone depleter. Flammability and toxicity risks are negligible, as discussed above. Thus, we find that the Mini-Max Cleaner® is acceptable because it does not pose a greater risk to public health and the environment in the end uses listed. For more information refer to the manufacturer of the Mini-Max Cleaner®.

D. Aerosols

1. Mini-Max Cleaner®

EPA's decision:

The Mini-Max Cleaner® is acceptable as a substitute for CFC-113, methyl chloroform, and HCFCs in aerosol solvents.

Environmental information: For further information about the Mini-Max Cleaner®, see above in section B.1 on solvent cleaning.

Flammability information: For further information about the Mini-Max Cleaner®, see above in section B.1 on solvent cleaning.

Toxicity and exposure data: For further information about the Mini-Max Cleaner®, see above in section B.1 on solvent cleaning.

Comparison to other aerosol solvents: The Mini-Max Cleaner® is not an ozone depleter. Flammability and toxicity risks are negligible, as discussed above. Thus, we find that the Mini-Max Cleaner® is acceptable because it does not pose a greater risk to public health and the environment in the end use listed.

E. Sterilants

1. Mini-Max Cleaner®

EPA's decision:

The Mini-Max Cleaner® is acceptable as a substitute for CFC-12, HCFC-22, HCFC-124 and blends thereof in the sterilization sector.

EPA previously found steam acceptable as a sterilant under 59 FR13044, March 18, 1994. You may find the submission under Docket items EPA-HQ-OAR-2003-0118-0120 and -0124 at www.regulations.gov.

Environmental information: For further information about the Mini-Max Cleaner®, see above in section B.1 on solvent cleaning.

Flammability information: For further information about the Mini-Max Cleaner®, see above in section B.1 on solvent cleaning.

Toxicity and exposure: EPA expects users to follow all recommendations

specified in the user's manual and other safety precautions common in the medical sterilization industry.

Comparison to other sterilants: The Mini-Max Cleaner® is not an ozone depleter. Flammability risks are negligible, as discussed above. The toxicity is less than that of ethylene oxide and its blends. Thus, we find the Mini-Max Cleaner® acceptable because it does not pose a greater risk to public health and the environment.

II. Section 612 Program

A. Statutory Requirements

Section 612 of the Clean Air Act authorizes EPA to develop a program for evaluating alternatives to ozone-depleting substances. We refer to this program as the Significant New Alternatives Policy (SNAP) program. The major provisions of section 612 are:

- **Rulemaking**—Section 612(c) requires EPA to promulgate rules making it unlawful to replace any class I (chlorofluorocarbon, halon, carbon tetrachloride, methyl chloroform, and hydrobromofluorocarbon) or class II (hydrochlorofluorocarbon) substance with any substitute that the Administrator determines may present adverse effects to human health or the environment where the Administrator has identified an alternative that (1) reduces the overall risk to human health and the environment, and (2) is currently or potentially available.

- **Listing of Unacceptable/Acceptable Substitutes**—Section 612(c) also requires EPA to publish a list of the substitutes unacceptable for specific uses. We must publish a corresponding list of acceptable alternatives for specific uses.

- **Petition Process**—Section 612(d) grants the right to any person to petition EPA to add a substance to or delete a substance from the lists published in accordance with section 612(c). The Agency has 90 days to grant or deny a petition. Where the Agency grants the petition, it must publish the revised lists within an additional six months.

- **90-day Notification**—Section 612(e) directs EPA to require any person who

produces a chemical substitute for a class I substance to notify the Agency not less than 90 days before new or existing chemicals are introduced into interstate commerce for significant new uses as substitutes for a class I substance. The producer must also provide the Agency with the producer's unpublished health and safety studies on such substitutes.

- **Outreach**—Section 612(b)(1) states that the Administrator shall seek to maximize the use of Federal research facilities and resources to assist users of class I and II substances in identifying and developing alternatives to the use of such substances in key commercial applications.

- **Clearinghouse**—Section 612(b)(4) requires the Agency to set up a public clearinghouse of alternative chemicals, product substitutes, and alternative manufacturing processes that are available for products and manufacturing processes which use class I and II substances.

B. Regulatory History

On March 18, 1994, EPA published the final rulemaking (59 FR 13044) that described the process for administering the SNAP program and issued our first acceptability lists for substitutes in the major industrial use sectors. These sectors include:

- Refrigeration and air conditioning;
- Foam blowing;
- Solvents cleaning;
- Fire suppression and explosion protection;
- Sterilants;
- Aerosols;
- Adhesives, coatings and inks; and
- Tobacco expansion.

These sectors comprise the principal industrial sectors that historically consumed the largest volumes of ozone-depleting compounds.

As described in this original rule for the SNAP program, EPA does not believe that rulemaking procedures are required to list alternatives as acceptable with no limitations. Such listings do not impose any sanction, nor do they remove any prior license to use

a substance. Therefore, by this notice we are adding substances to the list of acceptable alternatives without first requesting comment on new listings.

However, we do believe that notice-and-comment rulemaking is required to place any substance on the list of prohibited substitutes, to list a substance as acceptable only under certain conditions, to list substances as acceptable only for certain uses, or to remove a substance from the lists of prohibited or acceptable substitutes. We publish updates to these lists as separate notices of rulemaking in the **Federal Register**.

The Agency defines a "substitute" as any chemical, product substitute, or alternative manufacturing process, whether existing or new, intended for use as a replacement for a class I or class II substance. Anyone who plans to market or produces a substitute for an ODS in one of the eight major industrial use sectors must provide EPA with health and safety studies on the substitute at least 90 days before introducing it into interstate commerce for significant new use as an alternative. This requirement applies to substitute manufacturers, but may include importers, formulators, or end-users, when they are responsible for introducing a substitute into commerce.

You can find a complete chronology of SNAP decisions and the appropriate **Federal Register** citations from the SNAP section of EPA's Ozone Depletion World Wide Web site at <http://www.epa.gov/ozone/snap/chron.html>. This information is also available from the Air Docket (see **ADDRESSES** section above for contact information).

List of Subjects in 40 CFR Part 82

Environmental protection, Administrative practice and procedure, Air pollution control, Reporting and recordkeeping requirements.

Dated: September 19, 2006.

Brian J. McLean,

Director, Office of Atmospheric Programs.

APPENDIX A: SUMMARY OF ACCEPTABLE DECISIONS

| End-use | Substitute | Decision | Further information |
|---|--|-------------|---------------------|
| Refrigeration and Air Conditioning | | | |
| Centrifugal chillers (retrofit and new). | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |

APPENDIX A: SUMMARY OF ACCEPTABLE DECISIONS—Continued

| End-use | Substitute | Decision | Further information |
|---|---|-------------|---------------------|
| Screw chillers (retrofit and new). | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |
| Reciprocating chillers (retrofit and new). | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |
| Industrial process refrigeration (retrofit and new). | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| | R-421B (Choice R421B) as a substitute for HCFC-22, R-502, and CFC-12. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| | R-426A (RS-24) as a substitute for CFC-12. | Acceptable. | |
| | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |
| | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| Industrial process air conditioning (retrofit and new). | R-426A (RS-24) as a substitute for CFC-12. | Acceptable. | |
| | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |
| | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| | R-426A (RS-24) as a substitute for CFC-12. | Acceptable. | |
| | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |
| | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| Retail food refrigeration (retrofit and new). | R-421B (Choice R421B) as a substitute for HCFC-22, R-502, and CFC-12. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| | R-426A (RS-24) as a substitute for CFC-12. | Acceptable. | |
| | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |
| | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| | R-421B (Choice R421B) as a substitute for HCFC-22, R-502, and CFC-12. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| Cold storage warehouses (retrofit and new). | R-426A (RS-24) as a substitute for CFC-12. | Acceptable. | |
| | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |
| | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| | R-421B (Choice R421B) as a substitute for HCFC-22, R-502, and CFC-12. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| | R-426A (RS-24) as a substitute for CFC-12. | Acceptable. | |
| | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |
| Refrigerated transport (retrofit and new). | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |

APPENDIX A: SUMMARY OF ACCEPTABLE DECISIONS—Continued

| End-use | Substitute | Decision | Further information |
|--|---|-------------|---------------------|
| Commercial ice machines (retrofit and new). | R-421B (Choice R421B) as a substitute for HCFC-22, R-502, and CFC-12. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| | R-426A (RS-24) as a substitute for CFC-12. | Acceptable. | |
| | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |
| | R-407D as a substitute for CFC-12. | Acceptable. | |
| | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| | R-421B (Choice R421B) as a substitute for HCFC-22, R-502, and CFC-12. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| Ice skating rinks (retrofit and new). | R-426A (RS-24) as a substitute for CFC-12. | Acceptable. | |
| | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |
| | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| | R-421B (Choice R421B) as a substitute for HCFC-22, R-502, and CFC-12. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| | R-426A (RS-24) as a substitute for CFC-12. | Acceptable. | |
| | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |
| | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| Household refrigerators and freezers (retrofit and new). | R-421B (Choice R421B) as a substitute for HCFC-22, R-502, and CFC-12. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| | R-426A (RS-24) as a substitute for CFC-12. | Acceptable. | |
| | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |
| | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| | R-421B (Choice R421B) as a substitute for HCFC-22, R-502, and CFC-12. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| | R-426A (RS-24) as a substitute for CFC-12. | Acceptable. | |
| Vending machines (retrofit and new). | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |
| | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| | R-426A (RS-24) as a substitute for CFC-12. | Acceptable. | |
| Water coolers (retrofit and new). | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| | R-426A (RS-24) as a substitute for CFC-12. | Acceptable. | |
| | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |

APPENDIX A: SUMMARY OF ACCEPTABLE DECISIONS—Continued

| End-use | Substitute | Decision | Further information |
|--|--|---------------------------------------|--|
| Residential dehumidifiers (retrofit and new). | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | Users must use the unique fittings and label specified by the manufacturer. Use is subject to requirements under § 609 of the Clean Air Act. |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| | R-426A (RS-24) as a substitute for CFC-12. | Acceptable. | |
| | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |
| Non-mechanical heat transfer (retrofit and new). | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| Household and light commercial air conditioning and heat pumps (retrofit and new). | R-421A (Choice R421A) as a substitute for HCFC-22. | Acceptable. | |
| | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| | R-424A (RS-44) as a substitute for HCFC-22. | Acceptable. | |
| Motor vehicle air conditioning (buses and passenger trains only). | ISCEON MO29 (R-422D) as a substitute for HCFC-22. | Acceptable. | |
| Motor vehicle air conditioning. | R-426A (RS-24) as a substitute for CFC-12. | Acceptable subject to use conditions. | |

Foam Blowing

| | | | |
|--|--|-------------|--|
| Polystyrene, Extruded Boardstock & Billet. | Ecomate™ as a substitute for CFCs and HCFCs. | Acceptable. | OSHA established a permissible exposure limit for the main component of Ecomate™ of 100 ppm for a time-weighted average over an eight-hour work shift. |
| Phenolic Insulation Board & Bunstock. | Ecomate™ as a substitute for CFCs and HCFCs. | Acceptable. | OSHA established a permissible exposure limit for the main component of Ecomate™ of 100 ppm for a time-weighted average over an eight-hour work shift. |
| Flexible Polyurethane | Ecomate™ as a substitute for CFCs and HCFCs. | Acceptable. | OSHA established a permissible exposure limit for the main component of Ecomate™ of 100 ppm for a time-weighted average over an eight-hour work shift. |
| Polyurethane, Extruded Sheet. | Ecomate™ as a substitute for CFCs and HCFCs. | Acceptable. | OSHA established a permissible exposure limit for the main component of Ecomate™ of 100 ppm for a time-weighted average over an eight-hour work shift. |
| Polyolefin | Ecomate™ as a substitute for CFCs and HCFCs. | Acceptable. | OSHA established a permissible exposure limit for the main component of Ecomate™ of 100 ppm for a time-weighted average over an eight-hour work shift. |

Cleaning Solvents

| | | | |
|----------------------------|--|-------------|--|
| Metal cleaning | The Mini-Max Cleaner® as a substitute for CFC-113, methyl chloroform, and HCFCs. | Acceptable. | |
| Electronics cleaning | The Mini-Max Cleaner® as a substitute for CFC-113, methyl chloroform, and HCFCs. | Acceptable. | |
| Precision cleaning | The Mini-Max Cleaner® as a substitute for CFC-113, methyl chloroform, and HCFCs. | Acceptable. | |

APPENDIX A: SUMMARY OF ACCEPTABLE DECISIONS—Continued

| End-use | Substitute | Decision | Further information |
|------------------------|--|-------------|---------------------|
| Aerosols | | | |
| Aerosol solvents | The Mini-Max Cleaner® as a substitute for CFC-113, methyl chloroform, and HCFCs. | Acceptable. | |
| Sterilants | | | |
| Sterilants | The Mini-Max Cleaner® as a substitute for CFC-12, HCFC-22, HCFC-124, and blends thereof. | Acceptable. | |

[FR Doc. E6-15833 Filed 9-27-06; 8:45 am]
BILLING CODE 6560-50-P

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 64

[CG Docket Nos. 02-278 and 05-338; FCC 06-42]

Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991; Junk Fax Prevention Act of 2005

AGENCY: Federal Communications Commission.

ACTION: Correcting amendments.

SUMMARY: This document contains corrections to the final regulations which were published in the **Federal Register** of Wednesday, May 3, 2006, 71 FR 25967. The regulations relate to the sending of unsolicited facsimile advertisements as required by the Junk Fax Prevention Act of 2005 (the Junk Fax Prevention Act).

DATES: Effective on August 1, 2006.

FOR FURTHER INFORMATION CONTACT: Erica McMahon or Richard Smith, Consumer & Governmental Affairs Bureau, (202) 418-2512.

SUPPLEMENTARY INFORMATION:

Background

The Federal Communications Commission published a document in the **Federal Register** on May 3, 2006, 71 FR 25967 amending part 64 of its rules on unsolicited facsimile advertisements as required by the Junk Fax Prevention Act.

Need for Correction

As published, the final regulations contain errors and omissions.

List of Subjects in 47 CFR Part 64

Communications common carriers, Telecommunications, Telephone.

Federal Communications Commission.

Marlene H. Dortch,
Secretary.

■ Accordingly, 47 CFR part 64 is corrected by making the following correcting amendments:

PART 64—MISCELLANEOUS RULES RELATING TO COMMON CARRIERS

■ 1. The authority citation for part 64 continues to read as follows:

Authority: 47 U.S.C. 154, 254(k) secs. 403(b)(2)(B), (c), Pub. L. 104-104, 110 Stat. 56. Interpret or apply 47 U.S.C. 201, 218, 222, 225, 226, 228, and 254(k) unless otherwise noted.

■ 2. Revise paragraphs (a)(3)(iii)(B) and (C) and add paragraphs (a)(4) through (a)(7) to read as follows:

§ 64.1200 Delivery restrictions.

- (a) * * *
- (3) * * *
- (iii) * * *

(B) The notice states that the recipient may make a request to the sender of the advertisement not to send any future advertisements to a telephone facsimile machine or machines and that failure to comply, within 30 days, with such a request meeting the requirements under paragraph (a)(3)(v) of this section is unlawful;

(C) The notice sets forth the requirements for an opt-out request under paragraph (a)(3)(v) of this section;

(4) Use an automatic telephone dialing system in such a way that two or more telephone lines of a multi-line business are engaged simultaneously.

(5) Disconnect an unanswered telemarketing call prior to at least 15 seconds or four (4) rings.

(6) Abandon more than three percent of all telemarketing calls that are

answered live by a person, or measured over a 30-day period. A call is “abandoned” if it is not connected to a live sales representative within two (2) seconds of the called person’s completed greeting. Whenever a sales representative is not available to speak with the person answering the call, that person must receive, within two (2) seconds after the called person’s completed greeting, a prerecorded identification message that states only the name and telephone number of the business, entity, or individual on whose behalf the call was placed, and that the call was for “telemarketing purposes.” The telephone number so provided must permit any individual to make a do-not-call request during regular business hours for the duration of the telemarketing campaign. The telephone number may not be a 900 number or any other number for which charges exceed local or long distance transmission charges. The seller or telemarketer must maintain records establishing compliance with paragraph (a)(6) of this section.

(i) A call for telemarketing purposes that delivers an artificial or prerecorded voice message to a residential telephone line that is assigned to a person who either has granted prior express consent for the call to be made or has an established business relationship with the caller shall not be considered an abandoned call if the message begins within two (2) seconds of the called person’s completed greeting.

(ii) Calls made by or on behalf of tax-exempt nonprofit organizations are not covered by paragraph (a)(6) of this section.

(7) Use any technology to dial any telephone number for the purpose of determining whether the line is a facsimile or voice line.

* * * * *

[FR Doc. 06-8245 Filed 9-27-06; 8:45 am]

BILLING CODE 6712-01-P

Message

From: Topinka, Natalie [topinka.natalie@epa.gov]
Sent: 3/3/2020 4:14:58 PM
To: Hall-Jordan, Luke [Hall-Jordan.Luke@epa.gov]; Sheppard, Margaret [Sheppard.Margaret@epa.gov]
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Okay, great, glad this isn't the first.

If **Ex. 5 Deliberative Process (DP)**

From: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Sent: Tuesday, March 03, 2020 10:13 AM
To: Topinka, Natalie <topinka.natalie@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 5 Deliberative Process (DP)

From: Topinka, Natalie <topinka.natalie@epa.gov>
Sent: Tuesday, March 03, 2020 10:21 AM
To: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Hi –

Ex. 5 Deliberative Process (DP)

Natalie

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Sent: Monday, March 02, 2020 10:17 AM
To: Topinka, Natalie <topinka.natalie@epa.gov>
Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>
Subject: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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Message

From: David M. (Max) Williamson [maxwilliamson@williamsonlawpolicy.com]
Sent: 3/2/2020 4:16:32 PM
To: Topinka, Natalie [topinka.natalie@epa.gov]
CC: Hall-Jordan, Luke [Hall-Jordan.Luke@epa.gov]; Sheppard, Margaret [Sheppard.Margaret@epa.gov]
Subject: Counterfeit R421A Non-SNAP Approved Refrigerant
Attachments: EPA SNAP Listing R-421A 71 FR 56884 (9-28-06) (Public Document).pdf; EPA SNAP Application Choice R421A HFC (Public Document).pdf; Commerce Preliminary Decision Unpatented 421A Anticircumvention (2-26-20).pdf; Initiation AntiCircumvention Inquiry HFC Components 84 FR 28273 (6-18-19).pdf

Ex. 4 CBI

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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the only individually calculated dumping margin is not zero, *de minimis*, or based entirely on facts otherwise available, the estimated weighted-average dumping margin calculated for Habich is the margin assigned to all other producers and exporters, pursuant to section 735(c)(5)(A) of the Act.

Amended Preliminary Determination

Commerce preliminarily determines that the following amended weighted-average dumping margins exist for the period July 1, 2017 through June 30, 2018:

| Exporter/producer | Estimated weighted-average dumping margin (percent) |
|-------------------|---|
| Habich GmbH | 2.50 |
| All Others | 2.50 |

Amended Cash Deposits and Suspension of Liquidation

The collection of cash deposits and suspension of liquidation will be revised according to the rates calculated in this amended preliminary determination, in accordance with sections 733(d) and (f) of the Act, and 19 CFR 351.224. Because the rates are increasing from the *Preliminary Determination*, the amended cash deposit rates will be effective on the date of publication of this notice in the **Federal Register**. Parties will be notified of this determination, in accordance with sections 733(d) and (f) of the Act.

Disclosure

We intend to disclose the calculations performed to parties in this proceeding within five days after public announcement of the amended preliminary determination, in accordance with 19 CFR 351.224.

Postponement of Final Determination and Extension of Provisional Measures

Section 735(a)(2) of the Act provides that a final determination may be postponed until not later than 135 days after the date of the publication of the preliminary determination if, in the event of an affirmative preliminary determination, a request for such postponement is made by exporters who account for a significant proportion of exports of the subject merchandise, or in the event of a negative preliminary determination, a request for such postponement is made by the petitioner. Section 351.210(e)(2) of Commerce's regulations requires that a request by exporters for postponement of the final

determination be accompanied by a request for extension of provisional measures from a four-month period to a period not more than six months in duration.

On April 12, 2019, pursuant to 19 CFR 351.210(e), Habich requested that Commerce postpone the final determination and that provisional measures be extended to a period not to exceed six months.⁷ In accordance with section 735(a)(2)(A) of the Act and 19 CFR 351.210(b)(2)(ii), because (1) the preliminary determination, as amended, is affirmative; (2) the requesting exporter accounts for a significant proportion of exports of the subject merchandise; and (3) no compelling reasons for denial exist, Commerce is postponing the final determination and extending the provisional measures from a four-month period to a period not greater than six months. Accordingly, Commerce will make its final determination no later than 135 days after the date of publication of the *Preliminary Determination*.⁸

International Trade Commission Notification

In accordance with section 733(f) of the Act, we will notify the International Trade Commission of our amended preliminary determination.

Notification to Interested Parties

This amended preliminary determination is issued and published in accordance with sections 733(f) and 777(i)(1) of the Act and 19 CFR 351.224(e).

Dated: June 12, 2019.

Jeffrey I. Kessler,

Assistant Secretary for Enforcement and Compliance.

Appendix

Scope of the Investigation

The merchandise covered by these investigations is strontium chromate, regardless of form (including but not limited to, powder (sometimes known as granular), dispersions (sometimes known as paste), or in any solution). The chemical formula for strontium chromate is SrCrO₄ and the Chemical Abstracts Service (CAS) registry number is 7789-06-2.

Strontium chromate that has been blended with another product or products is included in the scope if the resulting mix contains 15 percent or more of strontium chromate by total formula weight. Products with which

⁷ See Habich's letter, "Strontium Chromate from Austria; Habich GmbH's Request to Extend the Final Determination," dated April 12, 2019.

⁸ See *Preliminary Determination*.

strontium chromate may be blended include, but are not limited to, water and solvents such as Aromatic 100 Methyl Amyl Ketone (MAK)/2-Heptanone, Acetone, Glycol Ether EB, Naphtha Leicht, and Xylene. Subject merchandise includes strontium chromate that has been processed in a third country into a product that otherwise would be within the scope of these investigations if processed in the country of manufacture of the in-scope strontium chromate.

The merchandise subject to these investigations is currently classified in the Harmonized Tariff Schedule of the United States (HTSUS) under subheading 2841.50.9100. Subject merchandise may also enter under HTSUS subheading 3212.90.0050. While the HTSUS subheadings and CAS registry number are provided for convenience and customs purposes, the written description of the scope is dispositive.

[FR Doc. 2019-12840 Filed 6-17-19; 8:45 am]

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DEPARTMENT OF COMMERCE

International Trade Administration

[A-570-028]

Hydrofluorocarbon Blends From the People's Republic of China: Initiation of Anti-Circumvention Inquiry of Antidumping Duty Order; Components

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: In response to allegations of circumvention from the American HFC Coalition (the petitioners), the Department of Commerce (Commerce) is initiating an anti-circumvention inquiry to determine whether imports of hydrofluorocarbon (HFC) components R-32, R-125, and R-143a from the People's Republic of China (China) that are further processed into HFC blends in the United States are circumventing the antidumping duty (AD) order on HFC blends from China.

DATES: Applicable June 18, 2019.

FOR FURTHER INFORMATION CONTACT: Andrew Medley or Manuel Rey, AD/CVD Operations, Office II, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482-4987 and (202) 482-5518, respectively.

SUPPLEMENTARY INFORMATION:

Background

On April 4, 2019, the petitioners filed a request that, pursuant to section 781(a) of the Tariff Act of 1930, as amended (the Act), Commerce initiate an anti-circumvention inquiry regarding imports of HFC components R-32, R-125, and R-143a from China that are further processed into HFC blends in the United States, which the petitioners allege are circumventing the *Order*.¹ On April 26, 2019, National Refrigerants, Inc. (National Refrigerants) filed comments objecting to the petitioners' request to initiate an anti-circumvention inquiry regarding HFC components imported from China.² On May 13, 2019, the petitioners filed a response to National Refrigerants' comments.³ On May 14, 2018, Zhejiang Quzhou Lianzhou Refrigerants Co., Ltd. (Lianzhou) also filed comments objecting to the petitioners' request to initiate an anti-circumvention inquiry regarding HFC components imported from China.⁴

Scope of the Order

The products subject to the *Order* are HFC blends. HFC blends covered by the scope are R-404A, a zeotropic mixture consisting of 52 percent 1,1,1-Trifluoroethane, 44 percent Pentafluoroethane, and 4 percent 1,1,1,2-Tetrafluoroethane; R-407A, a zeotropic mixture of 20 percent Difluoromethane, 40 percent Pentafluoroethane, and 40 percent 1,1,1,2-Tetrafluoroethane; R-407C, a zeotropic mixture of 23 percent Difluoromethane, 25 percent Pentafluoroethane, and 52 percent 1,1,1,2-Tetrafluoroethane; R-410A, a zeotropic mixture of 50 percent Difluoromethane and 50 percent Pentafluoroethane; and R-507A, an azeotropic mixture of 50 percent

Pentafluoroethane and 50 percent 1,1,1-Trifluoroethane also known as R-507. The foregoing percentages are nominal percentages by weight. Actual percentages of single component refrigerants by weight may vary by plus or minus two percent points from the nominal percentage identified above.⁵

Any blend that includes an HFC component other than R-32, R-125, R-143a, or R-134a is excluded from the scope of the *Order*.

Excluded from the *Order* are blends of refrigerant chemicals that include products other than HFCs, such as blends including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrocarbons (HCs), or hydrofluoroolefins (HFOs).

Also excluded from the *Order* are patented HFC blends, including, but not limited to, ISCEON® blends, including MO99™ (R-438A), MO79 (R-422A), MO59 (R-417A), MO49Plus™ (R-437A) and MO29™ (R-4 22D), Genetron® Performax™ LT (R-407F), Choice® R-421A, and Choice® R-421B.

HFC blends covered by the scope of the *Order* are currently classified in the Harmonized Tariff Schedule of the United States (HTSUS) at subheadings 3824.78.0020 and 3824.78.0050. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope is dispositive.⁶

Merchandise Subject to the Anti-Circumvention Inquiry

This anti-circumvention inquiry covers imports of the HFC components R-32, R-125, and R-143a from China that are further processed in the United States to create an HFC blend that would be subject to the *Order*.

Initiation of Anti-Circumvention Proceeding

Section 781(a) of the Act and 19 CFR 351.225(g) provide that Commerce may find circumvention of an AD order

when merchandise of the same class or kind as merchandise that is subject to the order is completed or assembled in the United States. In conducting anti-circumvention inquiries under section 781(a)(1) of the Act, Commerce relies upon the following criteria: (A) Merchandise sold in the United States is of the same class or kind as other merchandise that is subject to an AD order; (B) such merchandise sold in the United States is completed or assembled in the United States from parts or components produced in the foreign country with respect to which the AD order applies; (C) the process of assembly or completion in the United States is minor or insignificant; and (D) the value of the parts or components is a significant portion of the total value of the merchandise.

A. Merchandise of the Same Class or Kind

The petitioners provide evidence to demonstrate that various companies subject to the *Order* are importing R-32, R-125, or R-143a components from China to be blended into HFC blends covered by the *Order*, and, therefore, the requirements of section 781(a)(1)(A)(i) of the Act are satisfied.⁷ Specifically, the petitioners provide evidence showing that since the establishment of the *Order*, Chinese companies have begun selling Chinese components to U.S. companies, which are blended in the United States to make the same merchandise covered by the scope of the *Order*.⁸

B. Completion of Merchandise in the United States

The petitioners provide evidence to demonstrate that certain U.S. companies are importing Chinese-made HFC components to be further blended into HFC blends covered by the *Order*, and, therefore, the requirements of section 781(a)(1)(B) of the Act are satisfied.⁹ The petitioners point to evidence to demonstrate that patterns of trade have shifted from the investigation and show that Chinese companies are now exporting components, instead of in-

¹ See Petitioners' Letter, "Hydrofluorocarbon Blends from the People's Republic of China: Request to Initiate Anti-Circumvention Inquiry Pursuant to Section 781(a) of the Act," dated April 4, 2019 (Initiation Request); see also *Hydrofluorocarbon Blends from the People's Republic of China: Antidumping Duty Order*, 81 FR 55436 (August 19, 2016) (*Order*).

² See National Refrigerants' Letter, "Hydrofluorocarbon Blends from the People's Republic of China: Objection to Petitioners' Request for a § 781(a) Anti-Circumvention Inquiry and Request for a Meeting," dated April 26, 2019.

³ See Petitioners' Letter, "Hydrofluorocarbon Blends from the People's Republic of China; Request for Section 781(a) Investigation Regarding Certain Imported HFC Components: Response to National Refrigerants, Inc.," dated May 13, 2019.

⁴ See Lianzhou's Letter, "Zhejiang Quzhou Lianzhou Refrigerants Co., Ltd.'s Response to American HFC Coalition's Request for a § 781(a) Anti-Circumvention Inquiry and Request for Meeting, Antidumping Duty Order on Hydrofluorocarbon Blends from the People's Republic of China," dated May 14, 2019.

⁵ R-404A is sold under various trade names, including Forane® 404A, Genetron® 404A, Solkane® 404A, Klea® 404A, and Suva® 404A. R-407A is sold under various trade names, including Forane® 407A, Solkane® 407A, Klea® 407A, and Suva® 407A. R-407C is sold under various trade names, including Forane® 407C, Genetron® 407C, Solkane® 407C, Klea® 407C and Suva® 407C. R-410A is sold under various trade names, including EcoFluor R410, Forane® 410A, Genetron® R410A and AZ-20, Solkane® 410A, Klea® 410A, Suva® 410A, and Puron®. R-507A is sold under various trade names, including Forane® 507, Solkane® 507, Klea® 507, Genetron® AZ-50, and Suva® 507. R-32 is sold under various trade names, including Solkane® 32, Forane® 32, and Klea® 32. R-125 is sold under various trade names, including Solkane® 125, Klea® 125, Genetron® 125, and Forane® 125. R-143a is sold under various trade names, including Solkane® 143a, Genetron® 143a, and Forane® 125.

⁶ See *Order*.

⁷ See Initiation Request at 6–9, Exhibit 1 (iGas products website), Exhibit 2 (proprietary information), Exhibit 3 (iGas and BMP website), Exhibit 4 (proprietary information), Exhibit 5 (Florida Division of Corporations—Xianbin Meng Results), Exhibit 6 (proprietary information), and Exhibit 7 (Memorandum, "Respondent Selection for the Antidumping Duty Investigation of Hydrofluorocarbon Blends and Components Thereof from the People's Republic of China," dated August 17, 2015 (Respondent Selection Memo)).

⁸ *Id.*

⁹ *Id.* at 9–12, Exhibit 2 (proprietary information), Exhibit 7 (Respondent Selection Memo), Exhibit 8 (Census Data), Exhibit 9 (proprietary information).

scope HFC blends, and U.S. companies which previously had imported blends are now importing these components for the purpose of blending them in the United States into covered HFC blends.¹⁰

C. Minor or Insignificant Process

Under sections 781(a)(1)(C) and 781(a)(2) of the Act, Commerce will take into account five factors to determine whether the process of assembly or completion of merchandise in the United States is minor or insignificant. Specifically, Commerce will consider: (A) The level of investment in the United States; (B) the level of research and development in the United States; (C) the nature of the production process in the United States; (D) the extent of production facilities in the United States; and (E) whether the value of processing performed in the United States represents a small proportion of the value of the merchandise sold in the United States.

(1) Level of Investment in the United States

The petitioners provide evidence, including information presented to the International Trade Commission (ITC) during its investigation, to demonstrate that blending is a simple and straightforward process that requires relatively small investment (less than one million dollars), as compared to an order of magnitude of 25 to one, or even 50 to one, larger investment for the manufacture of HFC components.¹¹

(2) Level of Research and Development in the United States

The petitioners provide evidence to demonstrate that blending operations do not require significant research and development.¹²

(3) Nature of the Production Process in the United States

The petitioners provide evidence to demonstrate that the blending production process in the United States is a relatively simple process which only requires a holding tank for the finished HFC blend, some pipes, and a valve.¹³ Further, the petitioners contend that there is no chemical reaction and no temperature change involved in blending HFC components, and simply involves combining the components in accordance with the blending recipe,

then packaging the blend into various containers.¹⁴

(4) Extent of Production Facilities in the United States

The petitioners provide record evidence to demonstrate that blending is a simple operation that requires minimal personnel and very basic production facilities.¹⁵ The petitioners assert that the blending process simply combines the components together according to the recipe, and then packages the finished blend into containers.¹⁶

(5) Value of Processing Performed in the United States

The petitioners provide an analysis based on proprietary information to demonstrate that the blending process represents a very small percent of the total value of the imported components from China.¹⁷ Thus, the petitioners contend that such a small percentage of value-added represents a very small proportion of the value of the merchandise sold in the United States.

D. Value of Merchandise Produced in the Foreign Country Is a Significant Portion of the Value of the Merchandise

The petitioners provide record evidence to demonstrate that the components sourced from China are the primary inputs in the finished HFC blends and account for a significant portion of the total value of the merchandise, in accordance with section 781(a)(1)(D) of the Act.¹⁸ For example, the petitioners point to evidence that the average unit value of R-32, R-125, and R-143a was \$4.90 per-kilogram (kg) in 2018, while the average unit value of the in-scope HFC blends was \$6.71 per-kg.¹⁹

E. Factors To Consider in Determining Whether Action Is Necessary

Section 781(a)(3) of the Act identifies additional factors that Commerce shall consider in determining whether to include parts or components in an AD order as part of an anti-circumvention inquiry, such as patterns of trade, including sourcing patterns, and affiliations. The petitioners contend that based on the proprietary information and other evidence on the record, certain imports of components used to

produce blends subject to the *Order* represent a change in the pattern of trade.²⁰ In particular, the petitioners contend that there has been a surge of Chinese HFC components from various companies since the issuance of the *Order*, and this surge occurred at the same time HFC blends imported from China dramatically decreased from these same companies.²¹ Further, given the large disparity between the production facilities, investment, and amount of production-related workers needed to produce HFC components as compared to blending such components, there is a significant incentive for companies to evade application of AD duties upon importation by shifting their blending operations to the United States.²² The petitioners contend that this evidence points to a pattern of trade intended to be addressed by section 781(a) of the Act, which, if allowed to continue, will negate the effectiveness of the *Order*.

Conclusion

Based on the information provided by the petitioners, we determine that there is sufficient information to warrant an initiation of an anti-circumvention inquiry, pursuant to section 781(a) of the Act and 19 CFR 351.225(g). Commerce will determine whether the merchandise subject to the inquiry (as described in the “Merchandise Subject to the Anti-Circumvention Inquiry” section above) is circumventing the *Order* such that it should be included within the scope of the *Order*.

In accordance with 19 CFR 351.225(l)(2), if Commerce issues a preliminary affirmative determination, we will then instruct U.S. Customs and Border Protection to suspend liquidation and require a cash deposit of estimated duties, at the applicable rate, for each unliquidated entry of the merchandise at issue, entered or withdrawn from warehouse for consumption on or after the date of initiation of the inquiry.

Following consultation with interested parties, Commerce will establish a schedule for questionnaires and comments on the issues related to the inquiry. Before issuance of any affirmative determination, Commerce intends to notify the ITC of any proposed inclusion of the inquiry merchandise under the *Order* in accordance with section 781(e)(1)(A) of the Act. Pursuant to section 781(f) of the

¹⁰ *Id.*

¹¹ *Id.* at 13–14, Exhibit 10 (ITC Staff Conference transcript), and Exhibit 11 (ITC Hearing transcript).

¹² *Id.*

¹³ *Id.* at 14–15, Exhibit 11 (ITC Hearing transcript), Exhibit 12 (TTI Response to Section D QR), and Exhibit 13 (BMP Parking Lot Picture).

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.* at 15, Exhibit 8 (Census Data), Exhibit 14 (proprietary declaration), Exhibit 15 (proprietary information), and Exhibit 16 (proprietary information).

¹⁸ *Id.* at 15–16 and Exhibit 8 (Census Data).

¹⁹ *Id.*

²⁰ *Id.* at 16–19, Exhibit 2 (proprietary information), Exhibit 8 (Census Data), Exhibit 13 (BMP Parking Lot Picture), and Exhibit 17 (BMP Employees).

²¹ *Id.*

²² *Id.*

Act and 19 CFR 351.225(f)(5), Commerce intends to issue its final determination within 300 days of the date of publication of this initiation.

Notification to Interested Parties

This notice is published in accordance with section 781(a) of the Act and 19 CFR 351.225(g).

Dated: June 12, 2019.

Jeffrey I. Kessler,

Assistant Secretary for Enforcement and Compliance.

[FR Doc. 2019-12849 Filed 6-17-19; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE

International Trade Administration

[A-570-028]

Hydrofluorocarbon Blends From the People's Republic of China: Initiation of Anti-Circumvention Inquiry of Antidumping Duty Order; Unfinished Blends

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: In response to information from U.S. Customs and Border Protection (CBP) and allegations of circumvention from the American HFC Coalition (the petitioners), the Department of Commerce (Commerce) is initiating an anti-circumvention inquiry to determine whether imports of unfinished blends of hydrofluorocarbon (HFC) components R-32 and R-125 from the People's Republic of China (China) that are further processed into finished HFC blends in the United States are circumventing the antidumping duty (AD) order on HFC blends from China.

DATES: Applicable June 18, 2019.

FOR FURTHER INFORMATION CONTACT: Andrew Medley or Manuel Rey, AD/CVD Operations, Office II, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482-4987 and (202) 482-5518, respectively.

SUPPLEMENTARY INFORMATION:

Background

Commerce received information from CBP relating to the *Order* on HFC blends from China regarding certain blends comprised of HFC components R-32 and R-125, which closely resemble

subject HFC blends from China.¹ On April 2, 2018, Commerce published a notice that it was opening a scope segment of the proceeding and provided an opportunity for interested parties to comment.² On June 12, 2018, the petitioners filed comments on the CBP entry packages;³ on June 18, 2018, Weitron, Inc. and Weitron International Refrigeration Equipment (Kunshan) Co., Ltd. (collectively, Weitron) filed rebuttal comments.⁴

On August 14, 2018, the petitioners filed a request that, pursuant to section 781(a) of the Tariff Act of 1930, as amended (the Act), Commerce initiate an anti-circumvention inquiry regarding imports of unfinished blends of HFC components R-32 and R-125 from China that are further processed into finished HFC blends in the United States, which the petitioners allege are circumventing the *Order*.⁵ On August 23, 2018, Weitron submitted rebuttal comments.⁶

Scope of the Order

The products subject to the *Order* are HFC blends. HFC blends covered by the scope are R-404A, a zeotropic mixture consisting of 52 percent 1,1,1-Trifluoroethane, 44 percent Pentafluoroethane, and 4 percent 1,1,1,2-Tetrafluoroethane; R-407A, a zeotropic mixture of 20 percent Difluoromethane, 40 percent Pentafluoroethane, and 40 percent 1,1,1,2-Tetrafluoroethane; R-407C, a zeotropic mixture of 23 percent

¹ See *Hydrofluorocarbon Blends from the People's Republic of China: Antidumping Duty Order*, 81 FR 55436 (August 19, 2016) (*Order*).

² See *1-Hydroxyethylidene-1, 1-Diphosphonic Acid from the People's Republic of China; Cold-Rolled Steel Flat Products from Japan; Hydrofluorocarbon Blends from the People's Republic of China; Light-Walled Rectangular Pipe and Tube from the People's Republic of China: Opening of Scope Segments and Opportunity to Comment*, 83 FR 13952 (April 2, 2018) (*Opening of Scope Segments*).

³ See Petitioners' Letter, "Hydrofluorocarbon Blends from the People's Republic of China: Comments on Scope Segment for Certain R-32/R-125 Blends," dated June 12, 2018.

⁴ See Petitioners' Letter, "Weitron's Response to American HFC Coalition's Comments on Scope Segment, Antidumping Duty Order on Hydrofluorocarbon Blends from the People's Republic of China," dated June 18, 2018.

⁵ See Petitioners' Letter, "Hydrofluorocarbon Blends from the People's Republic of China: Scope Investigation Regarding Certain R-32/R-125 Blends: Request to Apply Section 781(a) to Prevent Circumvention," dated August 14, 2018 (Initiation Request).

⁶ See Weitron's Letter, "Weitron's Response to Anti-Circumvention Allegation; Request to Reject, or Alternatively, Request for Extension of Time to Reply: Antidumping Duty Order on Hydrofluorocarbon Blends from the People's Republic of China," dated August 23, 2018 (Weitron's August 23, 2018 Response to Anti-Circumvention Allegation).

Difluoromethane, 25 percent Pentafluoroethane, and 52 percent 1,1,1,2-Tetrafluoroethane; R-410A, a zeotropic mixture of 50 percent Difluoromethane and 50 percent Pentafluoroethane; and R-507A, an azeotropic mixture of 50 percent Pentafluoroethane and 50 percent 1,1,1-Trifluoroethane also known as R-507. The foregoing percentages are nominal percentages by weight. Actual percentages of single component refrigerants by weight may vary by plus or minus two percent points from the nominal percentage identified above.⁷

Any blend that includes an HFC component other than R-32, R-125, R-143a, or R-134a is excluded from the scope of the *Order*.

Excluded from the *Order* are blends of refrigerant chemicals that include products other than HFCs, such as blends including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrocarbons (HCs), or hydrofluoroolefins (HFOs).

Also excluded from the *Order* are patented HFC blends, including, but not limited to, ISCEON® blends, including MO99™ (R-438A), MO79 (R-422A), MO59 (R-417A), MO49Plus™ (R-437A) and MO29™ (R-4 22D), Genetron® Performax™ LT (R-407F), Choice® R-421A, and Choice® R-421B.

HFC blends covered by the scope of the *Order* are currently classified in the Harmonized Tariff Schedule of the United States (HTSUS) at subheadings 3824.78.0020 and 3824.78.0050. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope is dispositive.⁸

Merchandise Subject to the Anti-Circumvention Inquiry

This anti-circumvention inquiry covers imports of partially finished blends of HFC components R-32 and R-125 from China that are further processed in the United States to create

⁷ R-404A is sold under various trade names, including Forane® 404A, Genetron® 404A, Solkane® 404A, Klea® 404A, and Suva® 404A. R-407A is sold under various trade names, including Forane® 407A, Solkane® 407A, Klea® 407A, and Suva® 407A. R-407C is sold under various trade names, including Forane® 407C, Genetron® 407C, Solkane® 407C, Klea® 407C and Suva® 407C. R-410A is sold under various trade names, including EcoFluor R410, Forane® 410A, Genetron® R410A and AZ-20, Solkane® 410A, Klea® 410A, Suva® 410A, and Puron®. R-507A is sold under various trade names, including Forane® 507, Solkane® 507, Klea® 507, Genetron® AZ-50, and Suva® 507. R-32 is sold under various trade names, including Solkane® 32, Forane® 32, and Klea® 32. R-125 is sold under various trade names, including Solkane® 125, Klea® 125, Genetron® 125, and Forane® 125. R-143a is sold under various trade names, including Solkane® 143a, Genetron® 143a, and Forane® 125.

⁸ See *Order*.

Message

From: Maranion, Bella [Maranion.Bella@epa.gov]
Sent: 3/6/2020 12:49:51 AM
To: David M. (Max) Williamson [maxwilliamson@williamsonlawpolicy.com]
CC: Sheppard, Margaret [Sheppard.Margaret@epa.gov]; Hall-Jordan, Luke [Hall-Jordan.Luke@epa.gov]
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Great, look forward to talking to you then.

Best regards,
Bella

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Sent: Thursday, March 05, 2020 7:17 PM
To: Maranion, Bella <Maranion.Bella@epa.gov>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155

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From: Maranion, Bella <Maranion.Bella@epa.gov>
Sent: Thursday, March 5, 2020 2:29 PM
To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: FW: Counterfeit R421A Non-SNAP Approved Refrigerant

Dear Mr. Williamson,

I'm happy to schedule a call with you so I can better understand your concerns. I'm out of the office this week, so hope that we can connect next week. Some times that would work for me are:

- Tuesday 3/10 at 1pm,
- Wednesday 3/11 at 9:30am,
- Friday 3/13 at 9-11am.

Please let me know a good time for you.

Best regards,
Bella

ED_004847_00000436-00001

Bella A. Maranion, Branch Chief
Alternatives and Emissions Reduction Branch
U.S. Environmental Protection Agency
Office of Air and Radiation
Office of Atmospheric Programs, Stratospheric Protection Division
Phone: (202) 343-9749
maranion.bella@epa.gov

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Sent: Thursday, March 05, 2020 11:45 AM
To: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Maranion, Bella <Maranion.Bella@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155

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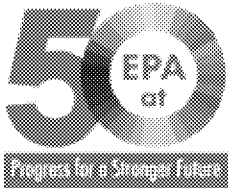
From: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Sent: Thursday, March 5, 2020 10:05 AM
To: Ken Ponder <choice.refrigerants@gmail.com>; David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Maranion, Bella <Maranion.Bella@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

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Best,
Luke

Luke Hall-Jordan
Chief, Stratospheric Program Implementation Branch
Stratospheric Protection Division, U.S. EPA
202-343-9591 (office)
202-230-7589 (mobile)



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Sent: Thursday, March 05, 2020 9:25 AM

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Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Topinka, Natalie <topinka.natalie@epa.gov>

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Comments

On Thu, Mar 5, 2020 at 8:40 AM David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com> wrote:

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Sent: Tuesday, March 3, 2020 4:40 PM
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Sincerely,

Margaret Sheppard

Lead Environmental Protection Specialist

Significant New Alternatives Policy (SNAP) Program

US EPA/Stratospheric Protection Division

Tel. 202-343-9163

Fax 202-343-2338

Email sheppard.margaret@epa.gov

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>

Sent: Monday, March 2, 2020 11:17 AM

To: Topinka, Natalie <topinka.natalie@epa.gov>

Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>

Subject: Counterfeit R421A Non-SNAP Approved Refrigerant

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--
Ken Ponder
Choice Refrigerants
610 McFarland 400 Drive
Alpharetta, GA 30004
(888) 659-COLD toll free
(770) 777-0597 phone
(770) 777-0599 fax
www.choicerefrigerants.com

Message

From: David M. (Max) Williamson [maxwilliamson@williamsonlawpolicy.com]
Sent: 3/6/2020 12:17:05 AM
To: Maranion, Bella [Maranion.Bella@epa.gov]
CC: Sheppard, Margaret [Sheppard.Margaret@epa.gov]; Hall-Jordan, Luke [Hall-Jordan.Luke@epa.gov]
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant
Attachments: ATT00001.txt

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From: Maranion, Bella <Maranion.Bella@epa.gov>
Sent: Thursday, March 5, 2020 2:29 PM
To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
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Best regards,
Bella

Bella A. Maranion, Branch Chief
Alternatives and Emissions Reduction Branch
U.S. Environmental Protection Agency
Office of Air and Radiation
Office of Atmospheric Programs, Stratospheric Protection Division
Phone: (202) 343-9749
maranion.bella@epa.gov

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Sent: Thursday, March 05, 2020 11:45 AM
To: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Maranion, Bella <Maranion.Bella@epa.gov>
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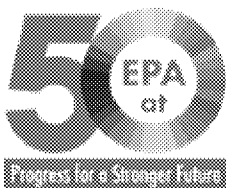
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Comments

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Sent: Tuesday, March 3, 2020 4:40 PM
To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>; Topinka, Natalie <topinka.natalie@epa.gov>
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US EPA/Stratospheric Protection Division

Tel. 202-343-9163

Fax 202-343-2338

Email sheppard.margaret@epa.gov

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>

Sent: Monday, March 2, 2020 11:17 AM

To: Topinka, Natalie <topinka.natalie@epa.gov>

Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>

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(770) 777-0599 fax
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Message

From: Maranion, Bella [Maranion.Bella@epa.gov]
Sent: 6/11/2020 5:18:46 PM
To: Sheppard, Margaret [Sheppard.Margaret@epa.gov]; Hall-Jordan, Luke [Hall-Jordan.Luke@epa.gov]
Subject: FW: Counterfeit R421A Non-SNAP Approved Refrigerant
Attachments: ATT00001.txt; Dynatemp 421A image (June 2020).JPG

Hi Margaret and Luke,

I'm coming back to this given a number of follow up emails from him. Margaret helpfully followed up and check on some of the sites and information that he shared, but really not much more information was available regarding the lubricant. Here's a draft response and would appreciate your review and any comments:

Ex. 5 Deliberative Process (DP)

If it's helpful to further discuss, please let us know.

Thanks,
Bella

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Sent: Thursday, June 11, 2020 11:00 AM
To: Maranion, Bella <Maranion.Bella@epa.gov>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

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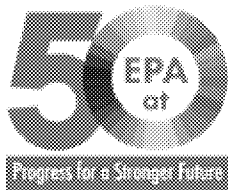
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Alpharetta, GA 30004
(888) 659-COLD toll free
(770) 777-0597 phone
(770) 777-0599 fax
www.choicerefrigerants.com

Message

From: Godwin, Dave [Godwin.Dave@epa.gov]
Sent: 3/5/2020 9:38:18 PM
To: Arling, Jeremy [Arling.Jeremy@epa.gov]; Sleasman, Katherine [Sleasman.Katherine@epa.gov]; Hall-Jordan, Luke [Hall-Jordan.Luke@epa.gov]; Maranion, Bella [Maranion.Bella@epa.gov]
CC: Banks, Julius [Banks.Julius@epa.gov]; Ford, Joe [Ford.Joe@epa.gov]
Subject: RE: Antidumping Duty on HFC-32 and HFC-125

More moves by Customs:

<https://www.federalregister.gov/documents/2020/03/03/2020-04354/hydrofluorocarbon-blends-from-the-peoples-republic-of-china-scope-ruling-on-unpatented-r-421a>

Hydrofluorocarbon Blends From the People's Republic of China: Scope Ruling on Unpatented R-421A; Affirmative Preliminary Determination of Circumvention of the Antidumping Duty Order for Unpatented R-421A; and Extension of Time Limit for Final Determination

SUMMARY:

The Department of Commerce (Commerce) preliminarily determines that imports of unpatented R-421A from the People's Republic of China (China) are circumventing the antidumping duty (AD) order on HFC blends from China. As a result, imports of blends of unpatented R-421A from China will be subject to suspension of liquidation effective June 18, 2019. We invite interested parties to comment on this preliminary determination.

Scope Ruling and Affirmative Preliminary Determination of Circumvention

As detailed in the Preliminary Decision Memorandum, we determine, pursuant to 19 CFR 351.225(k), that because the scope only covers five HFC blends, and unpatented R-421A is not one of the five blends, that consequently, unpatented R-421A is not covered by the scope of the Order within the meaning of 19 CFR Start Printed Page 12512351.225(k). Accordingly, because unpatented R-421A is not specifically excluded from the Order, a circumvention analysis and determination is warranted for the unpatented R-421A blends, under 19 CFR 351.225(g).

As detailed in the Preliminary Decision Memorandum, we preliminarily determine, pursuant to section 781(a) of the Tariff Act, that imports of unpatented R-421A from China are circumventing the Order.

From: Godwin, Dave

Sent: Thursday, 30 January, 2020 2:36 PM

To: Arling, Jeremy <Arling.Jeremy@epa.gov>; Sleasman, Katherine <Sleasman.Katherine@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Maranion, Bella <Maranion.Bella@epa.gov>

Cc: Banks, Julius <Banks.Julius@epa.gov>

Subject: Antidumping Duty on HFC-32 and HFC-125

FYI. This is trying to close the loop-hole in the HFC blend tariffs by also covering the components.

<https://www.commerce.gov/news/press-releases/2020/01/us-department-commerce-announces-affirmative-preliminary-circumvention>

U.S. Department of Commerce Announces Affirmative Preliminary Circumvention Ruling on Exports of Hydrofluorocarbon Blends from China

On January 21, 2020, the U.S. Department of Commerce announced an affirmative preliminary antidumping duty (AD) circumvention ruling involving imports of unfinished R-32/R-125 of hydrofluorocarbons (HFCs) from China that are further processed in the U.S., and are circumventing the existing AD order on imports of HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A) from China.

Accordingly, Commerce will instruct U.S. Customs and Border Protection (CBP) to collect AD cash deposits on imports of unfinished blends of HFC components R-32 and R-125 from China.

The applicable cash deposit rate will be equal to the rates previously established and in effect at the time of entry. Suspension will apply to any future imports and unliquidated entries since June 18, 2019 (the date which Commerce initiated this circumvention inquiry).

This inquiry was initiated in response to a covered merchandise referral from CBP and allegations of circumvention from the American HFC Coalition.

Commerce expects to issue its final ruling by April 7, 2020.

U.S. law provides that Commerce may find circumvention of AD or countervailing duty orders when merchandise subject to an existing order is completed or assembled in the United States from parts and components imported from the country subject to the order.

The strict enforcement of U.S. trade law is a primary focus of the Trump Administration. To date, the Trump Administration has issued 35 preliminary or final affirmative determinations in anti-circumvention inquiries – this is a 192 percent increase from the number of such determinations made during the comparable period in the previous administration.

Message

From: David M. (Max) Williamson [maxwilliamson@williamsonlawpolicy.com]
Sent: 6/11/2020 3:00:06 PM
To: Maranion, Bella [Maranion.Bella@epa.gov]
CC: Sheppard, Margaret [Sheppard.Margaret@epa.gov]; Hall-Jordan, Luke [Hall-Jordan.Luke@epa.gov]
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From: Maranion, Bella <Maranion.Bella@epa.gov>
Sent: Thursday, March 5, 2020 2:29 PM
To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: FW: Counterfeit R421A Non-SNAP Approved Refrigerant

Dear Mr. Williamson,

I'm happy to schedule a call with you so I can better understand your concerns. I'm out of the office this week, so hope that we can connect next week. Some times that would work for me are:

- Tuesday 3/10 at 1pm,
- Wednesday 3/11 at 9:30am,
- Friday 3/13 at 9-11am.

Please let me know a good time for you.

Best regards,
Bella

Bella A. Maranion, Branch Chief
Alternatives and Emissions Reduction Branch
U.S. Environmental Protection Agency
Office of Air and Radiation

ED_004847_00000443-00001

Office of Atmospheric Programs, Stratospheric Protection Division

Phone: (202) 343-9749

maranion.bella@epa.gov

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>

Sent: Thursday, March 05, 2020 11:45 AM

To: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>

Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Maranion, Bella <Maranion.Bella@epa.gov>

Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC

1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155

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From: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>

Sent: Thursday, March 5, 2020 10:05 AM

To: Ken Ponder <choice.refrigerants@gmail.com>; David M. (Max) Williamson
<maxwilliamson@williamsonlawpolicy.com>

Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Maranion, Bella <Maranion.Bella@epa.gov>

Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

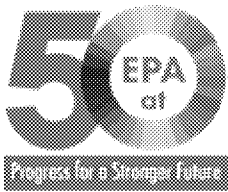
Hi Ken and Max,

I'm copying in Bella Maranion, my counterpart that manages the SNAP program, and removing Natalie from this chain for the time being. It seems like a follow up conversation with Bella and Margaret makes sense so you can better understand how the program operates and they can better understand your concerns. I'll leave it in their capable hands from here.

Best,
Luke

Luke Hall-Jordan
Chief, Stratospheric Program Implementation Branch
Stratospheric Protection Division, U.S. EPA
202-343-9591 (office)
202-230-7589 (mobile)

ED_004847_00000443-00002



From: Ken Ponder <choice.refrigerants@gmail.com>

Sent: Thursday, March 05, 2020 9:25 AM

To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>

Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Topinka, Natalie <topinka.natalie@epa.gov>

Subject: Re: Counterfeit R421A Non-SNAP Approved Refrigerant

Thank you for your response. Once again the simplest of logic our government doesn't recognize so sad. How could ms Shepard not see that our lubricant was part of our application? And as God as my witness on an EPA web site they listed the blend with mention of the lubricant. It's the product we sell and to change any part of a component changes the product. We might could include conversations with sherive chemical who produces my particular lubricant .

Comments

On Thu, Mar 5, 2020 at 8:40 AM David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com> wrote:

Ex. 4 CBI

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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From: Sheppard, Margaret <Sheppard.Margaret@epa.gov>
Sent: Tuesday, March 3, 2020 4:40 PM
To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>; Topinka, Natalie <topinka.natalie@epa.gov>
Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Mr. Williamson,

Thank you for contacting EPA.

The SNAP program's listing found acceptable R-421A, a refrigerant consisting of 58.0% HFC-125 and 42.0% HFC-134a by weight. The listing mentions Choice R421A as a common trade name for this refrigerant and does not mention the proprietary lubricant. Thus, as long as a refrigerant is sold that contains 58.0% HFC-125 and 42.0% HFC-134a by weight and no other refrigerants, it is consistent with EPA's listing and we would consider it to be acceptable, even if there is a different lubricant.

If those two compounds in that specific ratio are mixed with other refrigerants, then it would be a new refrigerant blend; depending on the composition, it might not be acceptable and it might require separate submission and review under SNAP.

Sincerely,

Margaret Sheppard

Lead Environmental Protection Specialist

Significant New Alternatives Policy (SNAP) Program

US EPA/Stratospheric Protection Division

Tel. 202-343-9163

Fax 202-343-2338

Email sheppard.margaret@epa.gov

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>

Sent: Monday, March 2, 2020 11:17 AM

To: Topinka, Natalie <topinka.natalie@epa.gov>

Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>

Subject: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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--
Ken Ponder
Choice Refrigerants
610 McFarland 400 Drive
Alpharetta, GA 30004
(888) 659-COLD toll free
(770) 777-0597 phone
(770) 777-0599 fax
www.choicerefrigerants.com

Message

From: Sheppard, Margaret [Sheppard.Margaret@epa.gov]
Sent: 3/30/2020 1:37:56 PM
To: Maranion, Bella [Maranion.Bella@epa.gov]
CC: Hall-Jordan, Luke [Hall-Jordan.Luke@epa.gov]
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Bella,

As I mentioned, I looked online to see what I could find about Dynatemp's lubricant. Their website did not specify; it also indicated the refrigerant could be used with mineral oil (MO), alkyl benzene (AB) oil, or polyol ester (POE) oil. That's all standard in this industry.

I went back and looked at the submission and emails I had concerning RMS of Georgia's submission for R-421A. They gave us the name of the vendor that supplies their refrigerant oil and the general type (alkyl benzene), but no specific

Ex. 5 Deliberative Process (DP) DP)

Margaret

From: Maranion, Bella <Maranion.Bella@epa.gov>
Sent: Sunday, March 29, 2020 4:15 PM
To: Sheppard, Margaret <Sheppard.Margaret@epa.gov>
Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: FW: Counterfeit R421A Non-SNAP Approved Refrigerant

Hi Margaret,

Let's discuss this week. I thought we or ICF were going to see what's publicly available on the Dynatemp product and if the lubricant is identified. I product may be considered

Ex. 5 Deliberative Process (DP) Ex. 5 Deliberative Process (DP)

Thoughts?

Thanks,
Bella

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Sent: Saturday, March 28, 2020 10:08 AM
To: Maranion, Bella <Maranion.Bella@epa.gov>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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From: David M. (Max) Williamson
Sent: Wednesday, March 25, 2020 2:12 PM
To: 'Maranion, Bella' <Maranion.Bella@epa.gov>
Cc: 'Sheppard, Margaret' <Sheppard.Margaret@epa.gov>; 'Hall-Jordan, Luke' <Hall-Jordan.Luke@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Thanks,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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From: David M. (Max) Williamson
Sent: Thursday, March 12, 2020 12:42 PM
To: Maranion, Bella <Maranion.Bella@epa.gov>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155

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From: David M. (Max) Williamson
Sent: Tuesday, March 10, 2020 5:13 PM
To: Maranion, Bella <Maranion.Bella@epa.gov>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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From: Maranion, Bella <Maranion.Bella@epa.gov>
Sent: Thursday, March 5, 2020 2:29 PM
To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: FW: Counterfeit R421A Non-SNAP Approved Refrigerant

Dear Mr. Williamson,

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- Tuesday 3/10 at 1pm,
- Wednesday 3/11 at 9:30am,
- Friday 3/13 at 9-11am.

Please let me know a good time for you.

ED_004847_00000472-00003

Best regards,
Bella

Bella A. Maranion, Branch Chief
Alternatives and Emissions Reduction Branch
U.S. Environmental Protection Agency
Office of Air and Radiation
Office of Atmospheric Programs, Stratospheric Protection Division
Phone: (202) 343-9749
maranion.bella@epa.gov

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Sent: Thursday, March 05, 2020 11:45 AM
To: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Maranion, Bella <Maranion.Bella@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155

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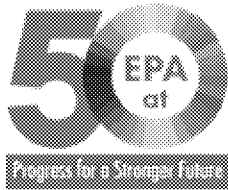
From: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Sent: Thursday, March 5, 2020 10:05 AM
To: Ken Ponder <choice.refrigerants@gmail.com>; David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Maranion, Bella <Maranion.Bella@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Hi Ken and Max,

I'm copying in Bella Maranion, my counterpart that manages the SNAP program, and removing Natalie from this chain for the time being. It seems like a follow up conversation with Bella and Margaret makes sense so you can better understand how the program operates and they can better understand your concerns. I'll leave it in their capable hands from here.

Best,
Luke

Luke Hall-Jordan
Chief, Stratospheric Program Implementation Branch
Stratospheric Protection Division, U.S. EPA
202-343-9591 (office)
202-230-7589 (mobile)



From: Ken Ponder <choice.refrigerants@gmail.com>
Sent: Thursday, March 05, 2020 9:25 AM
To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Topinka, Natalie <topinka.natalie@epa.gov>
Subject: Re: Counterfeit R421A Non-SNAP Approved Refrigerant

Thank you for your response. Once again the simplest of logic our government doesn't recognize so sad. How could ms Shepard not see that our lubricant was part of our application? And as God as my witness on an EPA web site they listed the blend with mention of the lubricant. It's the product we sell and to change any part of a component changes the product. We might could include conversations with sherive chemical who produces my particular lubricant .

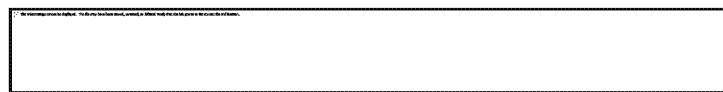
Comments

On Thu, Mar 5, 2020 at 8:40 AM David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com> wrote:

Ex. 4 CBI

Ex. 4 CBI

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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From: Sheppard, Margaret <Sheppard.Margaret@epa.gov>
Sent: Tuesday, March 3, 2020 4:40 PM
To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>; Topinka, Natalie <topinka.natalie@epa.gov>
Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Mr. Williamson,

Thank you for contacting EPA.

The SNAP program's listing found acceptable R-421A, a refrigerant consisting of 58.0% HFC-125 and 42.0% HFC-134a by weight. The listing mentions Choice R421A as a common trade name for this refrigerant and does not mention the proprietary lubricant. Thus, as long as a refrigerant is sold that contains 58.0% HFC-125 and 42.0% HFC-134a by weight and no other refrigerants, it is consistent with EPA's listing and we would consider it to be acceptable, even if there is a different lubricant.

If those two compounds in that specific ratio are mixed with other refrigerants, then it would be a new refrigerant blend; depending on the composition, it might not be acceptable and it might require separate submission and review under SNAP.

Sincerely,

Margaret Sheppard

Lead Environmental Protection Specialist

Significant New Alternatives Policy (SNAP) Program

US EPA/Stratospheric Protection Division

Tel. 202-343-9163

Fax 202-343-2338

Email sheppard.margaret@epa.gov

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>

Sent: Monday, March 2, 2020 11:17 AM

To: Topinka, Natalie <topinka.natalie@epa.gov>

Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>

Subject: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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--
Ken Ponder
Choice Refrigerants
610 McFarland 400 Drive
Alpharetta, GA 30004
(888) 659-COLD toll free
(770) 777-0597 phone
(770) 777-0599 fax
www.choicerefrigerants.com

Message

From: peter@neweragroupinc.com [peter@neweragroupinc.com]
Sent: 2/26/2020 5:43:14 PM
To: Hall-Jordan, Luke [Hall-Jordan.Luke@epa.gov]
Subject: [FWD: RE: SNAP]
Attachments: ATT00001.txt; R421A Statement.pdf



Luke,

Here is the issue on SNAP the patent holder looks to EPA to fix the problem. Not sure they remember this issue and that there is no 700 standard for virgin material.

I have turned this over to EPA SNAP since it's not been approved by them. They say in their announcement that it's deferent .

Peter Williams
202 528 0038

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----- Original Message -----
Subject: [FWD: RE: SNAP]
From: <peter@neweragroupinc.com>
Date: Wed, February 26, 2020 5:58 am



EPA has already decided issues like this. He wanted to stop Rick Roland back in 2014. EPA did not stop the Summit Plus from being sold. The Fact is that EPA has never acknowledged the additive he uses, they only approved the refrigerant components. If he looks at the facts the AHRI 700 Standard doesn't show any adjustment in the "High Boiling Residue". He can call EPA all he wants and they will be no help on the issue of SNAP Approval.

Sad!!!!

Peter Williams
202 528 0038

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----- Original Message -----

Subject: RE: SNAP
From: "Sheppard, Margaret" <Sheppard.Margaret@epa.gov>
Date: Wed, September 17, 2014 4:24 pm
To: "peter@neweragroupinc.com" <peter@neweragroupinc.com>
Cc: "Landolfi, Robert" <Landolfi.Robert@epa.gov>

Mr. Williams,

We consider Summit Plus to be HFC-134a, and that is on the list of acceptable alternatives for residential AC and heat pumps.
<http://www.epa.gov/ozone/snap/refrigerants/lists/homeac.html>

Sincerely,

Margaret Sheppard
Environmental Scientist
Significant New Alternatives Policy (SNAP) Program
US EPA/Stratospheric Protection Division
Tel. 202-343-9163
Fax 202-343-2338
Email sheppard.margaret@epa.gov

From: peter@neweragroupinc.com [<mailto:peter@neweragroupinc.com>]
Sent: Friday, September 05, 2014 7:19 AM
To: Sheppard, Margaret
Subject: SNAP



Ms. Sheppard,

On a number of occasions people have inquired on a refrigerant being sold in the United States called Summit Plus. This product is labeled with the UN 3159, while it is clear that in 2013, 134a was approved by EPA as a HCFC-22.

replacement it is widely held that this gas has no SNAP approval.

Please correct me if I am wrong. Does this gas have SNAP approval? Secondly if it does not have SNAP approval it is my understanding that this gas has a lubricant added which simply means that it is an unauthorized off spec 134a that doesn't meet AHRI Standards for 134a.

If these are the facts what is the intent of EPA to address this matter?

I will await your timely reply

Peter Williams

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Tolyltriazole is classified under Harmonized Tariff Schedule of the United States (HTSUS) subheading 2933.99.8220.

Sodium Tolyltriazole has the CAS registry number 64665-57-2 and is classified under HTSUS subheading 2933.99.8290.

Benzotriazole has the CAS registry number 95-14-7 and is classified under HTSUS subheading 2933.99.8210.

Sodium Benzotriazole has the CAS registry number 15217-42-2. Sodium Benzotriazole is classified under HTSUS subheading 2933.99.8290.

Although the HTSUS subheadings and CAS registry numbers are provided for convenience and customs purposes, the written description of the scope of this investigation is dispositive.

[FR Doc. 2020-04339 Filed 3-2-20; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE

International Trade Administration

[A-570-028]

Hydrofluorocarbon Blends From the People's Republic of China: Scope Ruling on Unpatented R-421A; Affirmative Preliminary Determination of Circumvention of the Antidumping Duty Order for Unpatented R-421A; and Extension of Time Limit for Final Determination

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: The Department of Commerce (Commerce) preliminarily determines that imports of unpatented R-421A from the People's Republic of China (China) are circumventing the antidumping duty (AD) order on HFC blends from China. As a result, imports of blends of unpatented R-421A from China will be subject to suspension of liquidation effective June 18, 2019. We invite interested parties to comment on this preliminary determination.

DATES: Applicable March 3, 2020.

FOR FURTHER INFORMATION CONTACT:

Andrew Medley or Manuel Rey, AD/CVD Operations, Office II, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482-4987 or (202) 482-3342, respectively.

SUPPLEMENTARY INFORMATION:

Background

On June 18, 2019, Commerce initiated an anti-circumvention inquiry to determine whether blends of unpatented R-421A from China, that are further processed into finished HFC

blends in the United States,¹ are circumventing the *Order* on HFC blends from China.² Additionally, in our *Notice of Initiation*, we stated that, as part of this anti-circumvention inquiry,³ we would also address both a covered merchandise referral from U.S. Customs and Border Protection (CBP),⁴ and a scope inquiry filed by Choice Refrigerants under 19 CFR.225(c).⁵ As part of this preliminary determination, we also have made a final scope finding. With respect to the covered merchandise referral, we will inform CBP of our findings at the conclusion of this anti-circumvention proceeding. For a complete description of the events that followed the initiation of this inquiry, see the Preliminary Decision Memorandum.⁶

Scope of the Order

The products subject to this order are HFC blends. HFC blends covered by the scope are R-404A, R-407A, R-407C, R-410A, and R-507A.⁷ HFC blends covered by the scope of the *Order* are currently classified in the Harmonized Tariff Schedule of the United States (HTSUS) at subheadings 3824.78.0020 and 3824.78.0050. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope is dispositive.

Merchandise Subject to the Anti-Circumvention Inquiry

This anti-circumvention inquiry covers imports of unpatented R-421A, a blend of HFC components R-125 (also known as Pentafluoroethane) and R-134a (also known as 1,1,1,2-Tetrafluoroethane), from China that are further processed in the United States to

create an HFC blend that would be subject to the *Order*.⁸

Methodology

Commerce made this preliminary finding of circumvention in accordance with section 781(a) of the Tariff Act of 1930, as amended (Act) and 19 CFR 351.225(g). We relied on information placed on the record by the American HFC Coalition (the petitioners) and information placed on the record by LM Supply Inc. and Cool Master USA, LLC, the importers of the merchandise in question, and their affiliated blenders, BMP USA Inc. (BMP USA) and iGas USA, Inc. Further, because certain interested parties did not cooperate to the best of their abilities in responding to Commerce's requests for information, we have based parts of our preliminary determination on the facts available, with adverse inferences, pursuant to sections 776(a) and (b) of the Act.

For a full description of the methodology underlying our conclusions, see the Preliminary Decision Memorandum. The Preliminary Decision Memorandum is a public document and is on file electronically via Enforcement and Compliance's Antidumping and Countervailing Duty Centralized Electronic Service System (ACCESS). ACCESS is available to registered users at <http://access.trade.gov>, and to all parties in the Central Records Unit, Room B8024 of the main Commerce building. In addition, a complete version of the Preliminary Decision Memorandum can be accessed directly at <http://enforcement.trade.gov/frn/>. The signed and electronic versions of the Preliminary Decision Memorandum are identical in content. A list of the topics discussed in the Preliminary Decision Memorandum is attached at the Appendix to this notice.

Scope Ruling and Affirmative Preliminary Determination of Circumvention

As detailed in the Preliminary Decision Memorandum, we determine, pursuant to 19 CFR 351.225(k), that because the scope only covers five HFC blends, and unpatented R-421A is not one of the five blends, that consequently, unpatented R-421A is not covered by the scope of the *Order* within the meaning of 19 CFR

¹ See *Hydrofluorocarbon Blends from the People's Republic of China: Initiation of Anti-Circumvention Inquiry of Antidumping Duty Order: Unpatented R-421A*, 84 FR 28281 (June 18, 2019) (*Notice of Initiation*).

² See *Hydrofluorocarbon Blends from the People's Republic of China: Antidumping Duty Order*, 81 FR 55436 (October 16, 2017) (*Order*).

³ See *Notice of Initiation*, 84 FR 28281, 28283-84.

⁴ See *Hydrofluorocarbon Blends from the People's Republic of China: Notice of Covered Merchandise Referral*, 83 FR 9277 (March 5, 2018).

⁵ See Choice Refrigerants' Letter, "Application for Scope Ruling on Exclusion of Patented HFC Blends from Antidumping Duty Order A-570-028: Hydrofluorocarbon Blends and Components Thereof from the People's Republic of China," dated November 30, 2017.

⁶ See Memorandum, "Decision Memorandum for Preliminary Decision Memorandum for Scope Ruling and Anti-Circumvention Inquiry of the Antidumping Duty Order on Hydrofluorocarbon Blends from the People's Republic of China; Unpatented R-421A" dated concurrently with, and hereby adopted by, this notice (Preliminary Decision Memorandum).

⁷ For a complete description of the scope of the order, see Preliminary Decision Memorandum.

⁸ The scope of the order explicitly excludes Choice® R-421A (also referred to as "patented R-421A"). The scope also only covers five HFC blends; R-421A is not one of the covered blends. Patented R-421A is a blend of 58 percent R-125, and 42 percent R-134a, with a lubricant added to it. The patent holder for R-421A is Choice Refrigerants.

351.225(k). Accordingly, because unpatented R-421A is not specifically excluded from the *Order*, a circumvention analysis and determination is warranted for the unpatented R-421A blends, under 19 CFR 351.225(g).

As detailed in the Preliminary Decision Memorandum, we preliminarily determine, pursuant to section 781(a) of the Tariff Act, that imports of unpatented R-421A from China are circumventing the *Order*.

Suspension of Liquidation

In accordance with 19 CFR 351.225(l)(2), Commerce will instruct CBP to suspend liquidation of all unpatented R-421A (as defined in the Merchandise Subject to the Anti-Circumvention Inquiry section above) from China that are entered, or withdrawn from warehouse, for consumption on or after June 18, 2019, the date of initiation of this anti-circumvention inquiry.⁹ CBP shall require cash deposits in accordance with those rates prevailing at the time of entry, depending upon the exporter in question. At this time, we have not included a certification requirement; however, based upon comments from interested parties, we may add such a certification requirement for the final determination.

Public Comment

Interested parties may submit case briefs to Commerce no later than 14 days after the date of publication of this notice.¹⁰ Rebuttal briefs, limited to issues raised in the case briefs, may be filed no later than five days after the time limit for filing case briefs.¹¹ Parties who submit case briefs or rebuttal briefs in this proceeding are encouraged to submit with each argument: (1) A statement of the issue; (2) a brief summary of the argument; and (3) a table of authorities.¹² Case and rebuttal briefs should be filed electronically via ACCESS.¹³

⁹ See, e.g., *Anti-circumvention Inquiry of the Antidumping Duty Order on Certain Pasta from Italy: Affirmative Preliminary Determination of Circumvention of the Antidumping Duty Order*, 63 FR 18364, 18366 (April 15, 1998), unchanged in *Anti-Circumvention Inquiry of the Antidumping Duty Order on Certain Pasta from Italy: Affirmative Final Determination of Circumvention of the Antidumping Duty Order*, 63 FR 54672, 54675-6 (October 13, 1998).

¹⁰ Commerce is exercising its discretion, under 19 CFR 351.309(c)(1)(ii), to alter the time limit for filing of case briefs.

¹¹ Commerce is exercising its discretion, under 19 CFR 351.309(d)(1), to alter the time limit for filing of rebuttal briefs.

¹² See 19 CFR 351.309(c)(2) and (d)(2).

¹³ See 19 CFR 351.303.

Pursuant to 19 CFR 351.310(c), interested parties who wish to request a hearing must submit a written request to the Assistant Secretary for Enforcement and Compliance, filed electronically and received successfully in its entirety, via ACCESS by 5:00 p.m. Eastern Time within 14 days after the date of publication of this notice.¹⁴ Hearing requests should contain: (1) The party's name, address, and telephone number; (2) the number of participants; and (3) a list of issues to be discussed. Issues raised in the hearing will be limited to issues raised in the briefs. If a request for a hearing is made, parties will be notified of the date and time for the hearing to be held at the U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230.¹⁵

Postponement of Final Determination

Section 781(f) of the Act provides that, to the maximum extent practicable, Commerce shall make its anti-circumvention determinations within 300 days from the date of initiation of the inquiry. We determine that it is not practicable to make a final determination in this anti-circumvention inquiry by the current deadline of April 13, 2020, because Commerce will require additional time to notify the U.S. International Trade Commission (ITC), and to review and analyze case and rebuttal briefs. Therefore, we are extending the time period for issuing the final determination in this inquiry by 45 days, to May 28, 2020.

Notification to the ITC

Consistent with section 781(e) of the Act, Commerce is notifying the ITC of this affirmative preliminary determination to include the merchandise subject to this inquiry within the AD order on HFC blends from China. Pursuant to section 781(e) of the Act, the ITC may request consultations concerning Commerce's proposed inclusion of the subject merchandise. These consultations must be concluded within 15 days after the date of the request. If, after consultations, the ITC believes that a significant injury issue is presented by the proposed inclusion, it will have 60 days to provide written advice to Commerce.

Notification to Interested Parties

This notice is published in accordance with section 781(a) of the Act and 19 CFR 351.225(g).

¹⁴ See 19 CFR 351.310(c).

¹⁵ *Id.*

Dated: February 25, 2020.

Christian Marsh,

Deputy Assistant Secretary for Enforcement and Compliance.

Appendix—List of Topics Discussed in the Preliminary Decision Memorandum

- I. Summary
- II. Background
- III. Merchandise Subject to the Scope and Anti-Circumvention Inquiry
- IV. Scope of the Order
- V. Statutory and Regulatory Framework for Scope Inquiry
- VI. Interested Party Scope Comments
- VII. Commerce's Scope Determination
- VIII. Period of Anti-Circumvention Inquiry
- IX. Surrogate Countries and Methodology for Valuing Inputs From China
- X. Statutory and Regulatory Framework for Anti-Circumvention Inquiry
- XI. Use of Facts Available With An Adverse Inference
- XII. Allegations of Circumvention as Identified in the Initiation of Inquiry
- XIII. Anti-Circumvention Analysis
- XIV. Intent To Consider Certification Requirement
- XV. Country-Wide Determination
- XVI. Recommendation

[FR Doc. 2020-04354 Filed 3-2-20; 8:45 am]

BILLING CODE 3510-DS-P

DEPARTMENT OF COMMERCE

International Trade Administration

[A-570-967; C-570-968]

Aluminum Extrusions From the People's Republic of China: Rescission of Antidumping and Countervailing Duty Circumvention Inquiries

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: The Department of Commerce (Commerce) is rescinding the anti-circumvention inquiries on aluminum extrusions from the People's Republic of China (China) that were initiated on May 6, 2019.

DATES: Applicable March 3, 2020.

FOR FURTHER INFORMATION CONTACT: Fred Baker, Office VI, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482-2924.

SUPPLEMENTARY INFORMATION:

Background

On May 26, 2011, Commerce published antidumping (AD) and countervailing duty (CVD) orders on

Message

From: Hall-Jordan, Luke [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=B6E9BB341B534CBC8828F9385433D36A-LHALLJOR]
Sent: 3/4/2020 1:23:51 PM
To: Sheppard, Margaret [Sheppard.Margaret@epa.gov]
CC: Topinka, Natalie [topinka.natalie@epa.gov]
Subject: Re: Counterfeit R421A Non-SNAP Approved Refrigerant

Thanks!

On Mar 3, 2020, at 11:19 AM, Sheppard, Margaret <Sheppard.Margaret@epa.gov> wrote:

Makes sense.

Natalie, we generally issue SNAP listings for a refrigerant blend, and any lubricant oils are added to that. So, a little different from Enviro-Safe, where the additional component was still a refrigerant, rather than oil.

Margaret

From: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Sent: Tuesday, March 3, 2020 11:13 AM
To: Topinka, Natalie <topinka.natalie@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 5 Deliberative Process (DP)

From: Topinka, Natalie <topinka.natalie@epa.gov>
Sent: Tuesday, March 03, 2020 10:21 AM
To: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Hi –

I spoke to Mr. Williamson the other day on this issue. In summary, the “counterfeit” R-421A is the same HFC blend but with a different, non-proprietary lubricant.

Ex. 5 Deliberative Process (DP)

Natalie

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>

Sent: Monday, March 02, 2020 10:17 AM

To: Topinka, Natalie <topinka.natalie@epa.gov>

Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>

Subject: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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Message

From: Hall-Jordan, Luke [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=B6E9BB341B534CBC8828F9385433D36A-LHALLJOR]
Sent: 3/30/2020 1:17:29 AM
To: Maranion, Bella [Maranion.Bella@epa.gov]
CC: Sheppard, Margaret [Sheppard.Margaret@epa.gov]
Subject: Re: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 5 Deliberative Process (DP)

On Mar 29, 2020, at 4:14 PM, Maranion, Bella <Maranion.Bella@epa.gov> wrote:

Hi Margaret,

Ex. 5 Deliberative Process (DP)

Thanks,
Bella

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Sent: Saturday, March 28, 2020 10:08 AM
To: Maranion, Bella <Maranion.Bella@epa.gov>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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From: David M. (Max) Williamson
Sent: Wednesday, March 25, 2020 2:12 PM
To: 'Maranion, Bella' <Maranion.Bella@epa.gov>
Cc: 'Sheppard, Margaret' <Sheppard.Margaret@epa.gov>; 'Hall-Jordan, Luke' <Hall-Jordan.Luke@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Thanks,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
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From: David M. (Max) Williamson
Sent: Thursday, March 12, 2020 12:42 PM
To: Maranion, Bella <Maranion.Bella@epa.gov>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

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Regards,

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ED_004847_00000763-00002

From: David M. (Max) Williamson
Sent: Tuesday, March 10, 2020 5:13 PM
To: Maranion, Bella <Maranion.Bella@epa.gov>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Regards,

David M. (Max) Williamson | Williamson Law + Policy, PLLC
1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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From: Maranion, Bella <Maranion.Bella@epa.gov>
Sent: Thursday, March 5, 2020 2:29 PM
To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: FW: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

Best regards,
Bella

Bella A. Maranion, Branch Chief

Alternatives and Emissions Reduction Branch
U.S. Environmental Protection Agency
Office of Air and Radiation
Office of Atmospheric Programs, Stratospheric Protection Division
Phone: (202) 343-9749
maranion.bella@epa.gov

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Sent: Thursday, March 05, 2020 11:45 AM
To: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Maranion, Bella <Maranion.Bella@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

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Regards,

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1850 M Street NW, Suite 840 | Washington, D.C. 20036 | (202) 256-6155



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From: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Sent: Thursday, March 5, 2020 10:05 AM
To: Ken Ponder <choice.refrigerants@gmail.com>; David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Cc: Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Maranion, Bella <Maranion.Bella@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Hi Ken and Max,

I'm copying in Bella Maranion, my counterpart that manages the SNAP program, and removing Natalie from this chain for the time being. It seems like a follow up conversation with Bella and Margaret makes sense so you can better understand how the program operates and they can better understand your concerns. I'll leave it in their capable hands from here.

Best,
Luke

Luke Hall-Jordan
Chief, Stratospheric Program Implementation Branch

ED_004847_00000763-00004

Stratospheric Protection Division, U.S. EPA
202-343-9591 (office)
202-230-7589 (mobile)

<image003.png>

From: Ken Ponder <choice.refrigerants@gmail.com>
Sent: Thursday, March 05, 2020 9:25 AM
To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>
Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret <Sheppard.Margaret@epa.gov>; Topinka, Natalie <topinka.natalie@epa.gov>
Subject: Re: Counterfeit R421A Non-SNAP Approved Refrigerant

Thank you for your response. Once again the simplest of logic our government doesn't recognize so sad. How could ms Shepard not see that our lubricant was part of our application? And as God as my witness on an EPA web site they listed the blend with mention of the lubricant. It's the product we sell and to change any part of a component changes the product. We might could include conversations with sherive chemical who produces my particular lubricant .

Comments

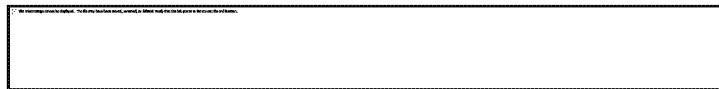
On Thu, Mar 5, 2020 at 8:40 AM David M. (Max) Williamson
<maxwilliamson@williamsonlawpolicy.com> wrote:

Ex. 4 CBI

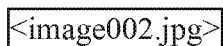
Ex. 4 CBI

Regards,

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From: Sheppard, Margaret <Sheppard.Margaret@epa.gov>
Sent: Tuesday, March 3, 2020 4:40 PM
To: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>; Topinka, Natalie <topinka.natalie@epa.gov>
Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>
Subject: RE: Counterfeit R421A Non-SNAP Approved Refrigerant

Mr. Williamson,

Thank you for contacting EPA.

The SNAP program's listing found acceptable R-421A, a refrigerant consisting of 58.0% HFC-125 and 42.0% HFC-134a by weight. The listing mentions Choice R421A as a common trade name for this refrigerant and does not mention the proprietary lubricant. Thus, as long as a refrigerant is sold that contains 58.0% HFC-125 and 42.0% HFC-134a by weight and no other refrigerants, it is consistent with EPA's listing and we would consider it to be acceptable, even if there is a different lubricant.

If those two compounds in that specific ratio are mixed with other refrigerants, then it would be a new refrigerant blend; depending on the composition, it might not be acceptable and it might require separate submission and review under SNAP.

Sincerely,

Margaret Sheppard

Lead Environmental Protection Specialist

Significant New Alternatives Policy (SNAP) Program

US EPA/Stratospheric Protection Division

Tel. 202-343-9163

ED_004847_00000763-00007

Fax 202-343-2338

Email sheppard.margaret@epa.gov

From: David M. (Max) Williamson <maxwilliamson@williamsonlawpolicy.com>

Sent: Monday, March 2, 2020 11:17 AM

To: Topinka, Natalie <topinka.natalie@epa.gov>

Cc: Hall-Jordan, Luke <Hall-Jordan.Luke@epa.gov>; Sheppard, Margaret
<Sheppard.Margaret@epa.gov>

Subject: Counterfeit R421A Non-SNAP Approved Refrigerant

Ex. 4 CBI

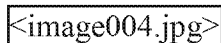
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Regards,

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Ken Ponder
Choice Refrigerants
610 McFarland 400 Drive
Alpharetta, GA 30004
(888) 659-COLD toll free
(770) 777-0597 phone
(770) 777-0599 fax
www.choicerefrigerants.com
<Dynatemp 421A Statement.pdf>

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BUILD YOUR PALLETS WITH THE R22 ALTERNATIVES YOU NEED!

**Write PrimeTime Promo on your purchase order to ensure you receive 5% rebate offer.*

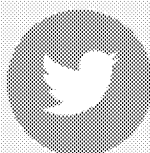
Contact your local sales representative for details. While supplies last, 2 or more pallets, shipped to a single location.

Pallets can be mixed and matched as long as they are made up of 80 cylinders of R22 alternatives.

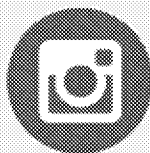
Qualifying products include: R421A, RS-44b, R-422B, R-422D, R427A, RS-45, & R421B.

**March 1st through March 31st, 2020*

For more information call: **(800) 791-9232** or visit our website: **dynatemprefrigerants.com**



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Message

From: Margaret Sheppard [Sheppard.Margaret@epamail.epa.gov]
Sent: 3/30/2020 2:34:53 PM
To: Sheppard, Margaret [Sheppard.Margaret@epa.gov]
Subject: Fw: Snap Application

Margaret Sheppard
Environmental Scientist
Significant New Alternatives Policy Program
USEPA/Stratospheric Protection Division
Tel. 202-343-9163
Fax 202-343-2338
email: sheppard.margaret@epa.gov

----- Forwarded by Margaret Sheppard/DC/USEPA/US on 03/30/2020 10:34 AM -----

From: Ken 1 <ken1@rmsgas.com>
To: Margaret Sheppard/DC/USEPA/US@EPA,
Date: 11/16/2005 11:16 AM
Subject: Snap Application

Margaret,
Got your email concerning the oil. What we are trying to convey after testing is that our products that do contain lubricants are compatible with existing materials used in typical equipment types and materials. Since our alternative refrigerants are meant to potentially replace other refrigerants it is important that compatibility of materials be good. For example in replacing R22 in an older system that contains mineral oil in the compressor with our new Choice R421A that contains a small amount of our lubricant which is AB type that there would be no adverse effects since it is widely known that AB can enhance the mineral oils lubricity factors. It is the same scenario with the low temp version R421B where typically the compressor contains for low temp applications a synthetic lubricant such as POE. In that example the R421B that contains a small percentage of our lubricant would have no adverse effects on the POE oil used in that system.

Thanks for you work on our applications. Should you have any farther questions or comments please feel free to call.

Ken Ponder
RMS of Georgia, LLC
800-347-5872
KEN@RMSGAS.COM